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Circular of Information

DARTMOUTH MEDICAL SCHOOL

ESTABLISHED IN 1798

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Medicine

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FREUIDENT'S OFFICE

CALENDAR

August 4 . . . Third and Fourth Year Courses began. September 24 . . . First and Second Year Courses began.

Recess from December 23, 10 A.M., to January 6, inclusive.

1909

March 26 . . . Third and Fourth Year Courses end.

Examinations by Delegates.

Graduating Exercises.

Recess from April 1, 10 A.M., to April 14, inclusive.

June 30 First and Second Year Courses end.

August 3 . . . Third and Fourth Year Courses begin.

September 23 . . First and Second Year Courses begin.

OFFICE HOURS

DEAN — William Thayer Smith — 9 School St., 1.30 P.M. and 7 P.M. daily.

FACULTY

| WILLIAM | LEWETT | TUCKER. | D.D., | LL.D. | PRESIDENT. |
|-----------|-----------------------|------------|-------|-------|-----------------|
| ********* | J = 2 1 1 = 2 = 2 = 2 | I C CLLLIN | 2.0., | | * ICEDOID DITTE |

WILLIAM THAYER SMITH, M.D., LL.D., DEAN, Professor Emeritus of Physiology, and Professor of Clinical Surgery.

9 School St.

- GILMAN DUBOIS FROST, A.M., M.D., SECRETARY and Professor of Anatomy.

 13 E. Wheelock St.
- HENRY MARTYN FIELD, A.M., M.D., Professor Emeritus of Therapeutics. Pasadena, Cal.
- PHINEAS SANBORN CONNER, M.D., LL.D., Professor Emeritus of Surgery. 215 W. 9th Street, Cincinnati.
- CHARLES BEYLARD GUERARD DE NANCRÈDE, M.D., LL.D., Professor of Surgery and Clinical Surgery.

Ann Arbor, Mich.

- EDWIN JULIUS BARTLETT, A.M., M.D., Professor of Chemistry (Academic department). 8 W. Wheelock St.
- TILGHMAN MINNOUR BALLIET, A.M., M.D., Professor of Therapeutics. 3709 Powelton Ave., Philadelphia.
- WILLIAM PATTEN, Ph.D., Professor of Biology (Zoölogy).
 (Academic department).

 15 Webster Ave.
- JOHN MARTIN GILE, A.M., M.D., Professor of the Science and Practice of Medicine.
- COLIN CAMPBELL STEWART, Ph.D., Brown Professor of Physiology. 14 Occom Ridge.
- HOWARD NELSON KINGSFORD, A.M., M.D., Professor of Pathology and Bacteriology. 6 Clement Road.
- GRANVILLE PRIEST CONN, A.M., M.D., Professor of Hygiene. Concord, N. H.
- EDWARD COWLES, M.D., LL.D., Professor of Mental Diseases.

 419 Boylston St., Boston.

GEORGE ADAMS LELAND, A.M., M.D., Professor of Otolaryngology. 354 Commonwealth Ave., Boston.

MYLES STANDISH, A.M., M.D., Professor of Ophthalmology. 6 St. James Ave., Boston.

JAMES RIDDLE GOFFE, M.D., Professor of Gynecology.
616 Madison Ave., New York.

JOHN OSBORN POLAK, M.S., M.D., Professor of Obstetrics. 287 Clinton Ave., Brooklyn, N. Y.

HARVEY PARKER TOWLE, A.B., M.D., Professor of Dermatology. 453 Marlborough St., Boston.

ERNEST HENRY WHEELER, M.D., Lecturer on Tropical Medicine.

Augusta, Me.

GEORGE BURGESS MAGRATH, M.D., Lecturer on Legal Medicine. 274 Boylston St., Boston.

PERCY BARTLETT, A.B., M.D., Instructor in Anatomy.

35 College St.

CHARLES ERNEST BOLSER, Ph.D., Assistant Professor of Chemistry (Academic department). 15 E. Wheelock St.

LEON BURR RICHARDSON, A.M., Instructor in Chemistry (Academic department).

GEORGE SELLERS GRAHAM, B.L., M.D., Instructor in Pathology and Bacteriology. Bridgman Block.

ARTHUR HOUSTON CHIVERS, A.M., Instructor in Biology (Botany, Academic department). 15 E. Wheelock St.

MARSHALL LOUIS ALLING, B.S., Demonstrator of Anatomy.

19 Maple St.

FRANK EVERETT KITTREDGE, M.D., Nashua, N. H. ARTHUR COWTON HEFFENGER, M.D. Portsmouth, N. H.

CHARLES SOLOMON CAVERLY, M.D., Rutland, Vt. HENRY CRAIN TINKHAM, M.D. Burlington, Vt.

GENERAL STATEMENT

Dartmouth Medical School was established by the Trustees of Dartmouth College in 1798, and it has graduated classes each year since that date. Its association with Dartmouth College, its location, its hospital privileges, afford an opportunity for laying a solid foundation in the sciences on which a successful career in the medical profession may rest.

ADMISSION

There will be a change in the requirements for admission in and after 1910 (see page 242). For the year 1909-1910 they will be as follows:

(1) A diploma from an approved college, or

(2) A diploma from a registered academy or high school, or

(3) Evidence of a preliminary education considered and accepted as fully equivalent.

Applicants having these credentials will be received without examination, provided the requirements in Latin, Chemistry, and Physics specified below, have been met.

All other candidates for admission, unless they can show by certificate from some approved fitting school or college that they have passed examinations in a part of the requirements, will be examined in all the following subjects:

English, History I or II, Mathematics, Latin, Chemistry, and Physics, according to specifications given below.

SUBJECTS WITH SPECIFICATIONS

ENGLISH -

Preparation in English has two main objects: (1) command of correct and clear English, spoken and written; (2) power to read with intelligence and appreciation.

English Grammar. — To secure the first end, training in grammar and the simpler principles of rhetoric, and the writing of frequent

compositions are essential. The candidate must be able to spell, capitalize, and punctuate correctly. He must show a practical knowledge of the essentials of English grammar, including ordinary grammatical terminology, inflections, syntax, the use of phrases and clauses; a thorough training in the construction of the sentence; and familiarity with the simpler principles of paragraph division and structure.

Reading.—To secure the second end, the reading of a certain number of books is prescribed. The list is intended to give the candidate the opportunity of reading, under intelligent direction, a number of important pieces of literature. The prescribed books are divided into two groups as follows:

A

The candidate should read the books prescribed below with a view to understanding and enjoying them. He will be expected to show a reasonable degree of familiarity with their substance. The form of examination will usually be the writing of paragraphs on each of several topics, to be chosen by the candidate from a considerable number set before him in the examination paper.

For students entering in 1909: 1 Shakespeare's The Merchant of Venice and Julius Cæsar; Bunyan's The Pilgrim's Progress (part I); the Sir Roger de Coverly Papers in the Spectator; Scott's The Lady of the Lake and Ivanhoe; Irving's Sketch Book; Macaulay's Lays of Ancient Rome; Tennyson's Gareth and Lynette, Lancelot and Elaine, and The Passing of Arthur; George Eliot's Silas Marner.

For Students entering in 1910 and 1911: Shakespeare's The Merchant of Venice; the Sir Roger de Coverly Papers in the Spectator; Franklin's Autobiography; Scott's The Lady of the Lake and Ivanhoe; Hawthorne's The House of the Seven Gables; Macaulay's Lays of Ancient Rome; Tennyson's Gareth and Lynette, Lancelot and Elaine, and The Passing of Arthur; Dickens' A Tale of Two Cities.

For Students entering in 1912:1 Shakespeare's As You Like It and

¹ The lists for the classes entering in 1909, 1910, 1911, and 1912 are selected from the lists adopted by the Conference on Uniform Entrance Requirements in English, at meetings held in New York City on February 22, 1905, and February 22, 1908. Candidates may present other selections from that list, provided they notify the Dean, on or before the first day of February preceding the examination, of the substitutions they wish to make.

Julius Cæsar; Franklin's Autobiography; Goldsmith's The Deserted Village; Dickens' A Tale of Two Cities; George Eliot's Silas Marner; Irving's Sketch Book; Scott's The Lady of the Lake; Byron's Mazeppa and The Prisoner of Chillon; Macaulay's Lays of Ancient Rome.

В

The candidate should read the books prescribed below with the view of acquiring such knowledge of their contents as will enable him to answer specific questions with accuracy and some detail. The examination is not designed, however, to require minute drill in difficulties of verbal expressions, unimportant allusions, and technical details.

For Students entering in 1909, 1910, 1911: Shakespeare's Macbeth; Milton's Lycidas, Comus, L'Allegro, and Il Penseroso; Burke's Speech on Conciliation with America, or Washington's Farewell Address and Webster's First Bunker Hill Oration; Macaulay's Life of Johnson, or Carlyle's Essay on Burns.

For Students entering in 1912: Shakespeare's Macbeth; Milton's Comus, L'Allegro, and Il Penseroso, or Tennyson's Gareth and Lynette, Lancelot and Elaine, and The Passing of Arthur; Burke's Speech on Conciliation with America, or Washington's Farewell Address and Webster's First Bunker Hill Oration; Macaulay's Life of Johnson, or Carlyle's Essay on Burns.

HISTORY (including Historical Geography) -

Either of the two following courses:

I. Ancient History. — This may cover the general field to 800 A.D.; but must in any case cover at least Greek History to the death of Alexander, with due reference to Greek life, literature, and art, and Roman History to the accession of Commodus, with due reference to literature and government.

II. English and American History. — English History with due reference to social and political development; American History with the elements of Civil Government.

In each of the above courses the following requirements must be met: (1) at least three recitations per week for two years, or five recitations per week for one year; (2) such general knowledge of the whole course as may be required from the study of accurate text-

books amounting to not less than 600 pages; (3) a full knowledge derived from suitable additional reading, in books of a less elementary nature, amounting to at least 600 pages; (4) comparisons between historical characters, periods and events, and in general the power to combine in orderly fashion the results of reading, and to exercise the judgment as well as the memory; (5) geographical knowledge tested by the location of places, movements, and territorial changes on an outline map (by physical features wherever possible as well as by political features).

MATHEMATICS -

Algebra.— The fundamental operations, simple equations with applications to problems involving two or more unknown quantities, the principles of factoring, involution and evolution applied to expressions containing fractional and negative exponents, radicals, including imaginaries and radical equations, quadratic equations, with applications to problems involving two unknown quantities.

Plane Geometry.— With the use of the metric system in the construction and solution of numerical problems based on the principal theorems.

LATIN -

The ability to translate at sight easy Latin prose.

This is the equivalent of a two years' course in an approved High School.

CHEMISTRY -

Acquaintance by laboratory work with elementary processes and with the properties of substances common in chemistry; familiarity with the chemical notation in its experimental and arithmetical meaning, including the ability to solve simple problems based on the relations expressed by formulas and equations; understanding and ability to use correctly the ordinary terms of Descriptive Chemistry. Bartlett's Laboratory Exercises, or equivalent. A certified note-book of laboratory work must be presented. The student should have had in addition recitations based upon any good elementary descriptive text-book through the non-metallic and metallic elements.

To meet the above requirement, at least 110 hours of elementary chemistry are necessary, one-half laboratory work, illustrat-

ing the preparation and the properties of the substances ordinarily treated in elementary chemistry. Qualitative Analysis will not be accepted as an equivalent for the laboratory work prescribed.

Note. — Certification of note-book must be careful enough to identify the work as done by the student. Certification on the cover or on a single leaf of a loose note-book will not be accepted. Each loose leaf should be signed by the student and stamped or otherwise identified by the instructor.

PHYSICS --

The equivalent of at least one hundred and ten one-hour exercises, of which as many as forty should be practical exercises in the laboratory. The student is expected, in the time devoted to the laboratory work, to perform at least forty experiments, and to have kept a neat and orderly record of the same in a note-book, described in his own words. This note-book should bear the certification of the instructor, and be presented for inspection at the time of the entrance examinations to the School.

The student should be taught, as far as possible, to apply the simpler principles of Algebra and Geometry to the solution of practical problems in Physics.

Any one of the following texts or manuals may be recommended for use in secondary schools preparing students for the Medical School: Elements of Physics, Carhart and Chute; Elements of Physics, Crew; A Text-Book of Physics, Hall and Bergen; Outlines of Physics, Nichols; Elements of Physics, Gage.

A student who has had Physics I and 2 in Dartmouth College or its equivalent will be admitted without condition in Physics.

The examinations for admission to the First or entering Class will be held in the Tuck Building, as follows:

| Chemistry | | | | | ٠, | • | 1.30-3.30 P. M., | Sept. | 17 |
|-----------|----|---|---|--|----|---|------------------|-------|----|
| Algebra | ٠. | | | | | | 4.00-6.00 Р. м. | " | 17 |
| Latin . | | | | | | | 8.00-10.00 A. M. | " | 18 |
| English . | | | ٠ | | | | 1.30-3.30 P. M. | 66 | 18 |
| Geometry | | 1 | ٠ | | | | 4.00-6.00 Р. м. | " | 18 |
| | | | | | | | 8.00-10.00 A. M. | " | 20 |
| | | | | | | | I.30-3.30 P. M. | " | 21 |
| | | | | | | | 4.00-6.00 P. M. | | 21 |

Each candidate taking an examination in Chemistry or Physics must present a laboratory note-book certified by his teacher.

ADVANCED STANDING

Applicants for advanced standing must bring official evidence of time spent in Medical Schools of laboratory work equivalent to that required in this School, and must pass examinations in the subjects in which the class which they wish to enter has been examined. Examinations taken elsewhere are not accepted.

REQUIREMENTS FOR ADMISSION IN AND AFTER 1910

- (1) A diploma from an approved college, or
- (2) The work of two years in an approved college, or
- (3) Evidence of a preliminary education considered and accepted as fully equivalent.

All applicants must present at least one year each of Chemistry, Biology, and Physics, and must be able to translate at sight easy Latin prose.

COMBINED COURSES

Beginning with 1910 candidates for the B.S. degree in the academic department of Dartmouth College may, at the opening of their junior year, matriculate in the Medical School, and take during their junior and senior years the work and the examinations of the first two years of the Medical School. They will thus be able to earn the degree of B.S. in four years and the degree of M.D. in six years.

Applicants who have completed two years in any approved college can, if they meet the requirements for admission to the Junior year in Dartmouth College and present the required work in Latin, Chemistry, Biology, and Physics, matriculate in the Medical School and earn the degree of B.S. in four years and the degree of M.D. in six years.

Students in Dartmouth College who are intending to earn the two degrees in six years are recommended to take the following courses:

FRESHMAN YEAR.

English 1 and 2, Biology 1 and 2, Mathematics 1 and 2 (or Physics 1 and 2 if Mathematics II was presented for admission), Physical Education 1, 2, and choose any two of the following languages: Latin 1 and 2, French 1, 2, or 3, 4, or 5, 6, or German 1, 2, or 3, 4, or 5, 6.

SOPHOMORE YEAR.

Chemistry 3 and 4, Biology 5 and 4, Physics 1, 2, or 3, 4, History 1 and 2, and continue one of the following languages: French 3, 4, or 5, 6, or 7, 8, or 11, 12, or German 3, 4, or 5, 6, or 7, 8.

JUNIOR YEAR (First Year in Medicine).

Chemistry 5 and 6, or 7 and 8, Biology 9 and 10, Physiology 1 and 2, Anatomy 1 and 2, Histology 1 and 2, with Economics 1 and 2, or Sociology 1 and 2, or Philosophy 1 and 2.

SENIOR YEAR (Second Year in Medicine).

Chemistry (Physiological and Medical), Physiology 3 and 4, Anatomy 3 and 4, Bacteriology 1 and 2, Materia Medica, Pathology, Dissection, with Economics 3 and 4, or Sociology 3 and 4, or Philosophy 3 and 4.

Candidates for the A.B. degree can as heretofore matriculate in the Medical School at the beginning of senior year provided they present the requirements in Chemistry, Biology, and Physics. They can thus earn the degree of A.B. in four years and the degree of M.D. in seven years.

For students who desire to take a preparatory course for the Medical School but do not expect to earn a degree from Dartmouth College, the Trustees offer the following two years' course:

English 1, 2, Mathematics 1, 2 (or Physics 1, 2 if Mathematics II

was presented for admission), Physics 1, 2, or 3, 4, Chemistry 3, 4, Biology 1, 2, 4, 5, Physical Education 1, 2, History 1, 2, and four of the following courses in French: French 1, 2, or 3, 4, or 5, 6, or 7, 8, or 11, 12, and four of the following courses in German: German 1, 2, or 3, 4, or 5, 6, or 7, 8, making a total of 62 semester hours for the two years.

Students desiring to pass from the Academic Department of the College to the Medical School must bring the certificate of the President of the College, with his approval of such transfer.

SUMMARY OF STUDENTS

| FOURTH YEAR | | | | | | | | | | | | 14 |
|--------------|---|----|----|---|---|--|--|--|---|---|---|----|
| THIRD YEAR. | | | ٠. | | | | | | | | | 12 |
| SECOND YEAR | | ٠. | | | | | | | | | | 17 |
| FIRST YEAR . | ٠ | ٠ | | ٠ | ٠ | | | | • | ٠ | ٠ | 15 |
| TOTAL | | | | | | | | | | | | 58 |

COURSE OF STUDY

The One Hundred and Thirteenth Annual Course will be opened on Tuesday, the third day of August, 1909.

For the third and fourth classes, the session beginning August 3, 1909, continues to March 25, 1910. For the first and second classes, the session beginning September 23, 1909, continues nine months to June 29, 1910.

The teaching is by lectures, recitations, laboratory work, and clinics, Students of the third and fourth classes are kept in close touch with hospital work and have daily bedside instruction.

The course covers four years with examinations on each year's work at its conclusion. These examinations, if satisfactory, will stand as final. At the end of the course an oral examination is held by delegates from the Medical Societies of New Hampshire and Vermont.

FIRST YEAR

Chemistry, Biology, Comparative Anatomy, Human Histology, Human Anatomy, Physiology.

SECOND YEAR

Systematic Anatomy, Physiology, Medical Chemistry, Pathology, Embryology, Bacteriology, Materia Medica, Analysis of blood and urine.

THIRD YEAR

Regional Anatomy, Pathology, Obstetrics, Surgery, Medicine, Therapeutics, Physical and Differential Diagnosis, Gynecology, Mental Diseases, Legal Medicine, Ophthalmology, Dermatology, Laryngology, Otology.

FOURTH YEAR

Therapeutics, Surgery, Medicine, Obstetrics, Gynecology, Mental Diseases, Legal Medicine, Hygiene, Ophthalmology, Laryngology, Otology, Dermatology.

SCHEDULE, 1908-1909

FIRST YEAR

| | - | ONDAY. | Tu | ESDAY. | WED | NESDAY. |
|--------|--|--|--|--|--|---|
| Hour. | Semester I. | Semester II. | Semester I. | Semester II. | Semester I. | Semester II. |
| 8 9 | Chemistry or Histology. Dr. Bolser or Dr. Graham. | Comparative Anatomy. Laboratory or Lecture. Dr. Patten. | | Physiology. Lectures and Demonstrations Dr. Stewart. | Chemistry or Histology, Dr. Bolser or Dr. Graham. | Comparative Anatomy. Laboratory or Lecture. Dr. Patten. |
| 10 | Histology or Chemistry. Dr. Graham or Dr. Bolser. | Chemistry, Laboratory, Dr. Bolser, | Human Anatomy. Recitation. Dr. Frost. Physiology. Lecture and Demonstration. Dr. Stewart. | Human Anatomy, Recitation. Dr. P. Bartlett. | Histology or Chemistry, Dr. Graham or Dr. Bolser. | Chemistry, Laboratory, Dr. Bolser. |
| P.M. 1 | Biology. Laboratory. Mr. Chivers. | Bacteriology. Laboratory. Dr. Graham. | | Bacteriology. Laboratory. Dr. Graham. | Biology, Laboratory, Mr. Chivers, | Bacteriology, Laboratory, Dr. Graham, |

FIRST YEAR

| Тния | RSDAY. | Fri | DAY. | SATU | RDAY. |
|--|---|--|---|--|---|
| Semester I. | Semester II. | Semester I. | Semester II. | Semester I. | Semester II. |
| | Physiology, Lectures and Demonstrations. Dr. Stewart. | Chemistry or Histology. Dr. Bolser or Dr. Graham. | Comparative Anatomy. Laboratory or Lecture. Dr. Patten. | | Physiology. Lectures and Demonstrations. Dr. Stewart. |
| Human Anatomy. Recitation. Dr. Frost. Physiology. Lecture and Demonstration. Dr. Stewart. | Human Anatomy, Recitation, Dr. P. Bartlett. | Histology or Chemistry. Dr. Graham or Dr. Bolser. | Chemistry. Laboratory. Dr. Bolser. | Human Anatomy. Recitation. Dr. Frost. Physiology. Lecture and Demonstration. Dr. Stewart. | Human Anatomy. Recitation. Dr P. Bartlett. |
| - 1 | Bacteriology. Recitation. Dr. Graham. | Biology. Laboratory. Mr. Chivers. | | | |

SECOND YEAR

| | Monday. | Tui | ESDAY. | WEDN | ESDAY. |
|--------|---|---|--------------|--|------------------|
| Hour. | Semester I. Semester II. | Semester I. | Semester II. | Semester I. | Semester II. |
| 9 | Physiology. Laboratory. Dr. Stewart. | Embryology. Laboratory. Dr. Patten. | Laboratory, | | ology. atory. |
| 10 | Anatomy. Recitation. Dr. P. Bartlett. | Patho | logy. | Anatomy. Recitation. Dr. P. Bartlett. | |
| 11 | Pathology. Lecture or Recitation. Dr. Kingsford, | Labori Dr. Kin | itory. | Pathology. Lecture or Recitation. Dr. Kingsford. | |
| P·M. 1 | Analysis of Blood. Dr. Kingsford — To Nov. 1. Dissection. Dr. P. Bartlett. Nov. 1 — Apr. 1. Analysis of Urine. Dr. Kingsford. Apr. 1 — June 18. | Medi Chemis Laborat Dr. E. J. I | stry. | Dissecti Laborat Dr. P. Ba | orv. |

SECOND YEAR

| Thur | SDAY. | FRII | DAY. | SATU | RDAY. | |
|---|-----------------------|---|---|---|---|--|
| Semester I. | Semester II. | Semester I. | Semester II. | Semester I. | Semester II. | |
| Embryology. Laboratory. Dr. Patten. Pathology. Lecture or Recitation. Dr. Kingsford. Materia Medica. Recitation. Dr. P. Bartlett. | | Phys | iology. | Embryology. | Pathology. Lecture or Recitation. Dr. Kingsford. | |
| | | | tewart. | Dr. Patten. | Materia Medica. Recitation. Dr. P. Bartlett. | |
| | nology. | Reci | tomy. tation. Bartlett. | Pathology. Laboratory. Dr. Kingsford. | | |
| | oratory. ingsford. | Reci | Chemistry. Itation. J. Bartlett. | | | |
| Medical Chemistry. Laboratory. Dr. E. J. Bartlett. | | Dr. Kingsfor Diss Dr. P Nov. 1 Analysi Dr. K | s of Blood. d — To Nov. 1. section Bartlett. — Apr. 1. ss of Urine. Lingsford. — June 18. | | | |

THIRD YEAR

| | Mon | IDAY. | Tues | SDAY. | Wedn | ESDAY. | |
|--------------------|--|---|---|--|--|---|--|
| Hour. | Aug. 4 to Sept. 17. | Sept. 17 to Mar. 20. | Aug. 4 to Sept. 17. | Sept. 17 to Mar. 20. | Aug. 4 to Sept. 17. | Sept. 17 to Mar. 20. | |
| A.M. 8 | Therapeutics. Lecture. Dr. Balliet. | Medicine. Recitation. Dr. Gile. | Therapeutics. Lecture. Dr. Balliet. | Medicine. Recitation. Dr. Gile. | Therapeutics. Lecture. Dr. Balliet. | Medicine. Recitation. Dr. Gile. | |
| 9 | Surgery. Lecture. Dr.deNancrède. | Anatomy. Recitation. Dr. Frost. | Surgery. Lecture. Dr.deNancrède. | | Surgery. Lecture. Dr.deNancrède. | Anatomy. Recitation. Dr. Frost. | |
| 10 | Therapeutics. Lecture. Dr. Balliet. | Diagnosis. Demonstration. Dr. Gile. | Therapeutics. Lecture. Dr. Balliet. | Diagnosis Demonstration. Dr. Gile. | Therapeutics. Lecture. Dr. Balliet. | Diagnosis. Demonstration. Dr. Gile. | |
| 11 | Surgery. Lecture. Dr. de Nancrède. | Medical Clinic. Dr. Frost. | Surgery. Lecture. Dr. de Nancrède. | Minor Surgery. Dr. P. Bartlett. | Surgery. Lecture. Dr.deNancrède. | Medical Clinic. Dr. Gile. | |
| P.M. | Lecture. | Lecture. | | | | Pathology. Demonstration. | |
| 1.30 | Otolaryngology. Dr. Leland. Aug. 4 to Aug. 17. | Obstetrics. Dr. Polak. Sept. 25 to Oct. 13. | Sa | me | Sa | Dr. Kingsford. | |
| to | Ophthalmology. Dr. Standish. Aug. 17 to Sept. 2. Dermatology. | Mental Disease. Dr. Cowles. Sept. 18 to Oct. 1. | a | s | as | | |
| 2.30 | Dr. Towle. Sept. 3 to Sept. 17. | Legal Medicine. Dr. Magrath. | Mon | day. | Monday. | | |
| 2.30 | Gynecology. Dr. Goffe. Sept. 13 to Sept. 27. | Hygiene. Dr. Conn. | | ı | | | |
| 2.30 to 4.30 | Clinic by the Lecturer of the last hour. | Sections at Hospital for Clinical work in laboratory and wards. | Surgical Clinic. Dr.deNancrède. | Dissection. Laboratory. Dr. P. Bartlett. | Clinic by the Lecturer of the last hour. | Sections at Hospital for Clinical work in laboratory and wards. | |

THIRD YEAR

| Thurs | SDAY. | FRID | AY. | SATUR | DAY. |
|--|--|--|---|--|---------------------------------------|
| Aug. 4 to Sept. 17. | Sept. 17 to Mar. 20. | Aug. 4 to Sept. 17. | Sept. 17 to Mar. 20. | Aug. 4 to Sept. 17. | Sept. 17 to Mar. 20. |
| Therapeutics. Lecture. Dr. Balliet. | Medicine. Recitation. Dr. Gile. | Therapeutics. Lecture. Dr. Balliet. | Medicine. Recitation. Dr. Gile. | Therapeutics. Lecture. Dr. Balliet. | Medicine. Recitation. Dr. Gile. |
| Surgery. Lecture. Dr.deNancrède. | Obstetrics. Recitation. Dr. Frost. | Surgery. Lecture. Dr. de Nancrède. | Anatomy. Recitation. Dr. Frost. | Surgery. Lecture. Dr. de Nancrède. | Obstetrics. Recitation. Dr. Frost. |
| Therapeutics. Lecture. Dr. Balliet. | Cherapeutics Gynecology. Lecture Recitation. | | Diagnosis. Demonstration. Dr. Gile. | Therapeutics. Lecture. Dr. Balliet. | Diagnosis. Demonstration. Dr. Gile. |
| Surgery. Lecture. Dr.deNancrède. | | | Medical Clinic. Dr. Frost or Dr. Gile. | Surgery. Lecture. Dr. de Nancrède. | Minor Surgery. Dr. P. Bartlett. |
| S | ame | Sa | me | | |
| | as | 6 | as | | |
| Мо | onday. | Мо | nday. | | |
| Surgical Dissection. Clinic. Dr.deNancrède. Dr. P. Bartlett. | | Clinic by the Lecturer of the last hour. | Sections at Hospital for Clinical work in laboratory and wards. | : | |

FOURTH YEAR

| • | | | | | | | |
|--------------------|---|--|---|---|--|--|--|
| | Mon | DAY. | Tues | SDAY. | WEDN | ESDAY, | |
| Hour. | Aug. 4 to Sept. 17. | Sept. 17 to Mar. 20. | Aug. 4 to Sept. 17. | Sept. 17 to Mar. 20. | Aug. 4 to Sept. 17. | Sept. 17 to Mar. 20. | |
| A.M. 8 | Therapeutics. Lecture. Dr. Balliet. | Medicine. Recitation. Dr. Gile. | Therapeutics. Lecture. Dr. Balliet. | Medicine. Recitation. Dr. Gile. | Therapeutics. Lecture. Dr. Balliet. | Medicine. Recitation. Dr. Gile. | |
| 9 | Surgery. Lecture. Dr. de Nancrède. | Surgery. Recitation. Dr. Smith. | Surgery. Lecture. Dr.deNancrède. | Diseases of Children. Recitation. Dr. Frost. | Surgery. Lecture. Dr. de Nancrède. | Surgery. Recitation. Dr. Smith. | |
| 10 | Therapeutics. Lecture. Dr. Balliet. | Diseases of the Nervous System. Recitation. Dr. Frost. | Therapeutics. Lecture. Dr. Balliet. | Surgical | Therapeutics. Lecture. Dr. Balliet. | Diseases of the Nervous System. Recitation. Dr. Frost. | |
| 11 | Surgery. Lecture. Dr.deNancrède. | Medical Clinic. Dr. Frost. | Surgery. Lecture. Dr.deNancrède. | Dr. Smith. | Surgery. Lecture. Dr.deNancrède. | Medical Clinic. Dr. Gile. | |
| P.M. | Lecture. | Lecture. | | | | | |
| 1.30 | Otolaryngology. Dr. Leland. Aug. 4 to Aug. 17. | Obstetrics. Dr. Polak. Sept. 25 to Oct. 13. | Sa | me | Sa | me | |
| to | Ophthalmology. Dr. Standish. Aug. 18 to Sept. 2. | Mental Disease. Dr. Cowles. Sept. 18 to Oct. 1. | a | s | a | s | |
| 2.30 | Dermatology. Dr. Towle. Sept. 3 to Sept. 17. | Legal Medicine. Dr. Magrath. | Mon | day. | Mon | day. | |
| | Gynecology. Dr. Goffe. Sept. 13 to Sept. 27. | Hygiene. Dr. Conn. | Trop Medi Dr. W | cine. | | | |
| 2.30 to 4.30 | Clinic by the Lecturer of the last hour. | Sections at Hospital for Clinical work in wards. | Surgical Clinic. Dr.deNancrède. | Sections at Hospital for Clinical work in wards. | Clinic by the Lecturer of the last hour. | Sections at Hospital for Clinical work in wards. | |

FOURTH YEAR

| Thurs | DAY. | FRID | AY. | SATUE | RDAY. |
|---|--|---|---|--|--|
| Aug. 4 to Sept. 17. | Sept. 17 to Mar. 20. | Aug. 4 to Sept. 17. | Sept. 17 to Mar. 20. | Aug. 4 to Sept. 17. | Sept. 17 to Mar. 20. |
| Therapeutics. Lecture. Dr. Balliet. | Medicine. Recitation. Dr. Gile. | Therapeutics. Lecture. Dr. Balliet. | Medicine. Recitation. Dr. Gile. | Therapeutics. Lecture. Dr. Balliet. | Medicine. Recitation. Dr. Gile. |
| Surgery. Lecture. Dr.deNancrède. | Obstetrics. Recitation. Dr. Frost. | Surgery. Lecture. Dr.deNancrède. | Surgery. Recitation. Dr. Smith. | Surgery. Lecture. Dr.deNancrède. | Obstetrics. Recitation. Dr. Frost. |
| Therapeutics. Lecture. Dr. Balliet. | Gynecology. Recitation. Dr. Gile. | Therapeutics. Lecture. Dr. Balliet. | Diseases of Children. Recitation. Dr. Frost. | Therapeutics. Lecture. Dr. Balliet. | Surgical Clinic. |
| Surgery. Lecture. Dr.de Nancrède. | Gynecological Clinic. Dr. Gile. | Surgery. Lecture. Dr.deNancrède | Medical Clinic. Dr. Gile or Dr. Frost. | Surgery. Lecture. Dr.deNancrède | Dr. Smith. |
| S | iame as | · s | ame as | | |
| | londay. | M | onday. | 9 | |
| Surgical Clinic. Dr. de Nancrè | Sections at Hospital fo clinical wor in wards. | T octurer of | clinical wor | or rk | |

DEPARTMENTS OF INSTRUCTION

BIOLOGY AND COMPARATIVE ANATOMY

PROFESSOR PATTEN, MR. CHIVERS, AND DR. GRIGGS

FIRST YEAR

- I. Elementary Biology. An introductory course giving a general survey of the field of Botany, some of the fundamental principles of Biology common to plants and animals, and a comprehensive review of the physiology, morphology, and reproduction of plants, special attention being paid to the lower plants and to the relation of fungi and bacteria to putrefaction, fermentation, and disease. One lecture and two laboratory exercises of two hours each per week. (Bergen and Davis, *Principles of Botany*.) First semester, fifty-four exercises.

 MR. CHIVERS AND DR. GRIGGS.
- 2. Comparative Anatomy of Vertebrates. The outlines of the classification of Vertebrates, the homologies and the histological structure of vertebrate organs, the theories of the structure of the vertebrate head, and of the derivation of the Chordata will be discussed. The object of the course is to illustrate the evolution of the vertebrate type of animals from the lowest fishes, and related forms, up to man, and to discuss some of the conditions that are coincident with, or determine, the progressive modification of various vertebrate organs. Second semester, fifty-four two-hour exercises.

PROFESSOR PATTEN.

SECOND YEAR

3. Vertebrate Embryology. A study of the Embryology of the frog, the chick, and a mammal. (Minot's Human Embryology, Hertwig's Embryology of Vertebrates, Heisler's Embryology.) First semester, fifty-four two-hour exercises.

PROFESSOR PATTEN.

ANATOMY

PROFESSOR FROST AND DR. P. BARTLETT.

FIRST YEAR

Osteology, Arthrology, and a preliminary study of the viscera. A course of recitations and demonstrations. Preparations from the Anatomical Museum are given out for study. An opportunity is offered to follow the dissections of the human body made by the men of the Second and Third classes. The written examinations covering the work in Osteology and Arthrology are final if satisfactory. (Gray's *Anatomy*, last edition.) First and second semesters, one hundred and four exercises.

PROFESSOR FROST AND DR. P. BARTLETT.

SECOND YEAR

Study of the muscles, blood vessels, lymphatics, and nerves by systems and by regions. Recitations and occasional lectures. Demonstrations by the instructor from manikins, plates, dried and wet preparations, and the cadaver. Dissection and demonstration of at least two parts by each student to the class. (Gray, Gerrish.)

DR. P. BARTLETT

THIRD YEAR

Study of the central nervous system and the viscera. Regional and Applied Anatomy. Lectures, recitations, and demonstrations. Dissection and demonstration of the remaining parts by the student. (Gray, Treves, Quain.)

PROFESSOR FROST.

PHYSIOLOGY

PROFESSOR C. C. STEWART

FIRST YEAR

1. A course of lectures, with demonstrations and occasional quizzes on the physiology of muscle and nerve, circulation, respiration, and animal heat. First semester, fifty-four exercises.

2. A continuation of Course 1, on the physiology of digestion, metabolism, secretion and excretion, the nervous system, and the special senses. Second semester, fifty-four exercises.

SECOND YEAR

- 3. The work of the second year will consist of laboratory exercises with demonstrations, recitations, and occasional lectures on the physiology of muscle and nerve, blood, circulation, respiration, and animal heat. A short experimental course on the physiological action of drugs is included. First semester, fifty-four exercises of two hours each.
- 4. A continuation of Course 3, taking up in the same way the physiology of digestion, metabolism, secretion and excretion, the nervous system, and the special senses.

The equipment of the laboratory provides a satisfactory set of apparatus for each two students. The set includes a clockwork kymograph, inductorium, moist chamber, recording and stimulating apparatus, tambours, circulation model, and many minor pieces; while for the work in chemical physiology a complete outfit of glassware, apparatus, and chemicals is provided. In addition to this the laboratory contains apparatus for demonstrations and for individual work or original investigation. Both the students' sets and the equipment of the general laboratory are being added to from time to time as the needs of the work direct.

THIRD YEAR

A course of twelve lectures on special subjects in advanced Physiology.

CHEMISTRY

PROFESSORS E. J. BARTLETT AND BOLSER, AND MR. RICHARDSON

FIRST YEAR

I. A systematic course, reviewing the Non-Metallic Elements rapidly, developing the more essential theories, and treating the Metallic Elements and their compounds, by lectures, recitations (Newth's *Inorganic Chemistry*), and by Qualitative Analysis in the

laboratory (Bolser and Richardson *Qualitative Analysis*). This course divides the time about equally between one-hour recitations and two-hour laboratory exercises. First and second semesters, fifty-four exercises in each, one or two hours.

PROFESSOR BOLSER AND MR. RICHARDSON

SECOND YEAR

2. (a) A short course in the more important compounds of carbon.

(b) Physiological and Medical Chemistry. A course with laboratory, lecture, and recitation work giving special attention to the carbohydrates and albumens, to Toxicology, the Chemistry of the body, and the applications of Chemistry to Medicine. First and second semesters.

PROFESSOR BARTLETT.

HISTOLOGY, BACTERIOLOGY, AND PATHOLOGY

PROFESSOR KINGSFORD AND DR. GRAHAM

FIRST YEAR

I. Histology. Laboratory work with recitations. The elementary tissues are first studied, then the various organs, including special study of the brain and cord. Each student may prepare and retain sections.

Six hours in the laboratory each week, two hours' recitation. This course extends through the first two-thirds of the year.

2. Bacteriology. Laboratory demonstrations supplemented by recitations. The aim in this course is to make it as practical as possible. Special attention is given to the examination of sputum for tubercle bacilli, to the diagnosis of diphtheria, the technic of the Widal serum diagnosis in typhoid fever, and to staining gonorrheal pus. Each student is required to isolate a number of different organisms. Special instruction is given to any student desirous of doing research work, either in bacteriology or pathology.

Four hours in the laboratory each week, two hours' recitation.

This course follows Histology and extends through the last third of the year.

As the Medical School affords accommodation to the State Laboratory of Bacteriology the supply of pathological and bacteriological

material accessible throughout the year is unusually large. Each student has an opportunity to act as voluntary assistant for a period of four weeks, and thus may obtain special training in the routine work of bacteriological examinations and technic and in general laboratory methods.

SECOND YEAR

- 3. Pathology. Six hours each week of laboratory work throughout the year. Lectures, three times each week, illustrated by demonstrations of gross lesions, two hours' recitation. The laboratory work is devoted to the study of the pathological histology of inflammation, the infectious diseases, tumors, etc. The sections may be prepared and retained by the student.
- 4. Haematology. Two lectures and one recitation, with two hours of laboratory work each week until November first. A course in the examination, preparation and staining of blood specimens, with special reference to clinical diagnosis. Both normal and pathological blood specimens are available for examination and study.
- 5. Urinary Examinations. Four hours of laboratory work and three hours of lectures and recitations each week from April first to June eighteenth. This course deals with the examination of normal and pathological urines, with special relation to the full study of urinary sediments. An abundance of material is available at all times.

THIRD YEAR

6. Pathology. One hour each week, taking up special subjects with demonstrations.

MATERIA MEDICA AND THERAPEUTICS

PROFESSOR BALLIET AND DR. P. BARTLETT.

SECOND YEAR

I. Materia Medica is taught by recitations three times each week in the second semester.

DR. P. BARTLETT.

THIRD AND FOURTH YEARS

2. Therapeutics. A course of sixty lectures with frequent quizzes and illustrations by the study of clinical cases at the Hospital.

PROFESSOR BALLIET.

GYNECOLOGY

PROFESSOR GOFFE AND DR. GILE

THIRD AND FOURTH YEARS

- 1. A course of twenty-four lectures illustrated by diagrams, supplemented by clinical teaching at the Hospital. The students make examinations of the cases presented and follow the operations and after-treatment.

 PROFESSOR GOFFE.
- 2. Recitations once a week supplemented by further clinical instruction at the Hospital through the year. Clinical material is abundant.

 DR. GILE.

OBSTETRICS

PROFESSOR POLAK AND DR. FROST

THIRD AND FOURTH YEARS

- I. A course of fifteen lectures illustrated by diagrams and the use of manikins.

 PROFESSOR POLAK.
- 2. Recitations with section work upon manikins by the student, two hours each week.

 DR. FROST.

Preparation is thus secured for a course in the Out-patient department of a Lying-In Hospital which the student is advised to take during the vacation at the end of the third year. Evidence of attendance upon eight cases of confinement is required of candidates for the degree.

3. Maternity cases are received at the Hospital, and when possible they serve to illustrate to the students in small sections the teaching and methods of obstetrics.

SURGERY

PROFESSOR DE NANCRÈDE, PROFESSOR SMITH, AND DR. P. BARTLETT

THIRD YEAR

1. A course in Minor Surgery given partly at the College and partly at the Hospital. Demonstrations and quizzes. Three hours each week.

Dr. P. Bartlett.

THIRD AND FOURTH YEARS

2. A course of seventy-two lectures supplemented by many clinical lectures and operations at the Hospital. The student is given cases to examine and study, and makes his report before the class.

PROFESSOR DE NANCRÈDE.

FOURTH YEAR

3. A course of recitations with further clinical lectures and study of individual cases by the student at the Hospital. Three hours each week.

PROFESSOR SMITH.

OPHTHALMOLOGY

PROFESSOR STANDISH

A course of twelve didactic lectures with many clinical lectures and operations before the class. An excellent opportunity is afforded each student to study these cases.

LARYNGOLOGY AND OTOLOGY

PROFESSOR LELAND

A course of ten didactic lectures with clinical lectures and many operations before the class. Opportunity to study and follow the treatment of individual cases.

LEGAL MEDICINE

DOCTOR MAGRATH

A course of twelve didactic lectures, expounding the relations of Law to Medicine in the various departments of municipal government and medical practice.

MENTAL DISEASES

PROFESSOR COWLES

A course of twenty didactic lectures in two successive years, covering the following topics:

1. The principles of mental pathology and the nature of mental

symptoms.

- 2. Mental physiology. Imperative ideas and psychological automatism.
- 3. Laws of the nervous and mental mechanism; the organic sensations in mental pathology; and the psychology and pathology of the emotions; the mental symptoms of nervous exhaustion.
 - 4. Forms of mental diseases.

HYGIENE

PROFESSOR CONN

A course of nine didactic lectures, giving instruction in the principles of sanitation and hygiene as applied to daily life and to the practice of medicine and surgery.

DERMATOLOGY

PROFESSOR TOWLE

A Course of twenty-four didactic lectures in two successive years. It is intended to make this course a practical one with special attention to the most common diseases of the skin. The lectures will be illustrated by photographs and supplemented by clinical demonstration.

MEDICINE

PROFESSOR GILE AND DR. FROST

THIRD YEAR

- t. Physical Diagnosis. Study of methods of examination and physical diagnosis, with enough of pathology to make the variations in the physical signs intelligible. About one-third of the course is given to lectures, one-third to recitations, and one-third to clinics. Five hours each week.

 PROFESSOR GILE.
 - 2. Medicine. Lectures and recitations six hours each week.

PROFESSOR GILE.

FOURTH YEAR

3. Medicine. Lectures and recitations with clinical examinations at the Hospital through the year. Six hours each week, with one or two hours additional each week of clinical examination at the Hospital.

PROFESSOR GILE.

- 4. Diseases of children. Two recitations and one hour of clinical work each week.

 DR. FROST.
- 5. Diseases of the Nervous System. Two recitations and one hour of clinical work each week.

 DR. FROST.

TEXT-BOOKS

ANATOMY - Gray, Gerrish, Quain, Treves.

BACTERIOLOGY — Williams, McFarland, Crookshank.

BIOLOGY - Bergen and Davis, Principles of Botany.

CHEMISTRY — Bartlett's Laboratory Exercises, Newth's Chemistry, Bolser and Richardson's Qualitative Analysis, Holland's Medical Chemistry, Rockwood's Laboratory Manual.

COMPARATIVE ANATOMY — Parker and Haswell.

DERMATOLOGY - Stelwagon, Pusey, Jackson, Van Harlingen.

DICTIONARY - Gould, Duane, Dorland.

DISEASES OF CHILDREN - Holt.

Embryology — Heisler.

GYNECOLOGY - Dudley, Bovée, Penrose.

HAEMATOLOGY — Cabot.

HISTOLOGY - Bailey, Stöhr.

LEGAL MEDICINE — Witthaus and Becker, Draper.

OBSTETRICS - Williams, Jewett, Webster.

OTOLARYNGOLOGY — Kyle, Diseases of Nose and Throat; Williams,
Diseases of Upper Respiratory Tract; Hovell, Diseases of Ear,
Lake, Diseases of Ear; Richards, Nose and Throat; Saunders,
Medical Hand Atlases: Gründewald, Diseases of the Larynx;
Brühl and Politzer, Diseases of Ear.

PATHOLOGY - Delafield and Prudden, Ziegler.

PHYSICAL DIAGNOSIS - Cabot, Anders, Butler's Diagnostics.

Physiology — Brubaker, Howell, Landois, Schäfer.

PRACTICE OF MEDICINE — Osler, Anders, Tyson.

Surgery — de Nancrède, American Text-book of Surgery, Da Costa, Park, Warren, Foote.

THERAPEUTICS — Wood, Hare, Cushing and Wilcox on Materia Medica and Pharmacy.

MENTAL DISEASES — Morat, Physiology of the Nervous System; Sherrington, The Integrative Action of the Nervous System; McDougall, Physiological Psychology; Kraepelin, Clinical Psychiatry; De Freesac, Psychiatry.

EXAMINATIONS AND GRADUATION

During the first year of the study of medicine in this School examinations will be required in Biology, Human Histology and Anatomy, Physiology, Chemistry, and Bacteriology. At the end of two full years of the study of medicine and two courses of lectures, an examination will be required in Systematic Anatomy, Physiology, Medical Chemistry, Embryology, Materia Medica, and Pathology. At the end of three full years of the study of medicine and three courses of lectures, an examination will be required in Systematic and Regional Anatomy, Physical Diagnosis, Therapeutics, Minor Surgery, and Obstetrics.

Certificates of Examinations passed at other Colleges are not accepted in place of our own examinations for a degree.

Every candidate for the degree of Doctor of Medicine must (1) be more than twenty-one years of age; (2) be of good moral character; (3) have graduated from a registered College or satisfactorily completed a full course in a registered academy or high school; or have had a preliminary education considered and accepted as fully equivalent; (4) have studied medicine not less than four full school years of at least nine months each, including four satisfactory courses of at least six months each, of which the last must be taken at this school, in four different calendar years, in a medical college registered as maintaining at the time a satisfactory standard; (5) present evidence that he has dissected all parts of the cadaver; (6) present evidence of attendance upon eight cases of confinement; (7) pass a satisfactory examination in Biology, Histology, Anatomy, Physiology, Chemistry, Bacteriology, Embryology, Materia Medica, Pathology, Physical Diagnosis, Therapeutics, Obstetrics, Gynecology, Surgery, Ophthalmology, Otology and Laryngology, Practice of Medicine, Mental Diseases, Dermatology, and Legal Medicine.

Final (oral) examinations before Delegates from the New Hampshire and Vermont Medical Societies will be held on March 26, 1909.

EXPENSES

Tuition is to be paid in two equal installments on October first and March first. Laboratory fees must be paid to the Treasurer at the beginning of each Semester.

| MATRICULATION — Paid once on entering \$5.00 |
|--|
| Tuition — For each of the four courses 100.00 |
| Chemicals and ordinary breakage, First year 6.00 |
| Second year 5.00 |
| Bacteriology and Histology. Material, First year 6.00 |
| Pathology. Material, Second year 5.00 |
| Biology and Comparative Anatomy. Material, First year 6.00 |
| Embryology. Material, Second year 3.00 |
| Physiology. Material, Second year, First semester 5.00 |
| Second year, Second semester . 4.00 |
| Anatomy. Material at cost |
| Room Rent |
| Board, per week 3.co to 5.00 |
| Text-books |
| Washing |

HOSPITAL

The Mary Hitchcock Memorial Hospital, a cottage hospital of thirty-six beds and a model in construction, furnishes clinical material and the opportunity to learn the methods of the most advanced hospital work.

In operating rooms with modern appointments the student has a close view of a large number of operations in general surgery and gynecology and of special operations upon the eye, ear, throat, and nose. He is able to follow these cases and note the after-treatment and results. The clinics are carefully used to illustrate the didactic teaching.

It is the hospital centre for a large part of New Hampshire and of Vermont. About eighty per cent of its cases are surgical.

During the year 1907-8 there have been 726 operations on inpatients.

Of 551 visits, operations, dressings, etc., in the out-patient department, 426 were surgical; of these 77 were nose, ear, or throat operations and treatments; 40 were operations or treatments of the eye.

There have been 7 gall-bladder operations; 160 operated cases of Appendicitis; 32 Hysterectomies; 104 operations on the Uterine Appendages; 29 Ventral Suspensions; 54 Curettements; 2 Nephrectomies; 3 Cataract operations; 31 Adenoid and Tonsil resections; and many others equally important to the student. Among the 170 Medical cases there have been diseases of the Circulatory, Respiratory, Genito-Urinary, and Nervous systems, and other classes of disease. These references are to a portion of the recorded cases.

Because the classes are small each student has the opportunity before graduating of receiving personal instruction at the bedside, of assisting in operations, and of giving ether. They are divided into small groups which follow up the cases and do the dressings under direction. They are taught physical diagnosis at the bedside and in the examining room. They make blood and urine tests of patients who are under their daily observation. The diagnosis, prognosis, and after history of these cases are discussed freely and in detail with the classes by the Instructors.

The appointment of a recent graduate as house officer is made every six months, and the position affords full and valuable experience. The terms of service begin on April first and October first and continue one year.

Those desiring further information may address WILLIAM T. SMITH, M.D., Dean, Hanover, N. H.

STUDENTS

GRADUATES OF 1908. HOSPITAL APPOINTMENTS

Crittendon, George Alanson Gane, William Howard Gilbert, Oscar Bowen * Giles, Raymond Larkin Howland, Clifford Kenney, John Joseph Knox, Howard Andrew Loder, Halsey Beach Quigley, William Sullivan Springfield Hospital Mary Hitchcock Hospital Carney Hospital

State Hospital, Howard, R. I. St. Josephs Hospital, R. I. Worcester Insane Hospital Boston City Hospital Carney Hospital

FOURTH YEAR

| Name | Residence | Room |
|----------------------------------|-----------------------|-------------------|
| Alling, Marshall Louis, B.S. | Kensington, Conn. | 19 Maple St. |
| Bodwell, William Mottimer, A.B. | Portland, Me. | 41 S. Main St. |
| Chase, Phillips Maurice, B.S. | Galesburg, Ill. | 4 School St. |
| Connell, Thomas Michael, A.B. | East Weymouth, Mass. | 15 S. Main St. |
| Larrabee, Edward Goodell | Auburn, Me. | 19 S. Main St. |
| Laton, George Peavey, A.B. | Nashua, N. H. | 15 S. Main St. |
| Nolan, John Hugh | New Britain, Conn. | 3 College St. |
| Nolan, William Joseph | New Britain, Conn. | 3 College St. |
| Pillsbury, Fitzroy Farnsworth | Saco, Me. | 19 Maple St. |
| Scribner, Frederick Parker, A.B. | Raymond, N. H. | 25 S. Main St. |
| Torrey, Arthur Stanley | Gloucester, Mass. | 15 S. Main St. |
| Towle, Murray Hanson | Northwood Ridge, N.H. | M. H. M. Hospital |
| Uniac, Thomas Vincent | Randolph, Mass. | 25 S. Main St. |
| Wilson, Homer Barnet | Sanbornton, N. H. | 9 W. South St. |
| | | |

THIRD YEAR

| Black, Dennis Leo, B.S. | Nashua, N. H. | 21 School St. |
|------------------------------|-------------------------|----------------|
| Clough, William Plummer | New London, N. H. | 5 S. Park St. |
| Felt, Paul Revere, A.B. | Hillsboro Bridge, N. H. | 21 School St. |
| Field, Thomas Sullivan, A.B. | Nashua, N. H. | 4 School St. |
| Haley, Paul | Medford, Mass. | 9 W. South St. |
| Kilburn, Ira Nelson | Holyoke, Mass. | 9 W. South St. |

^{*} Received an Hospital appointment but did not serve.

Name

Langill, Morton Howard, B.S. McKendree, Charles Alphonso, A.B. Manchester, N. H. Matthews, Frank Harrison Reilly, Thomas Edward, B.S. Storrs, Harry Carl, B.S. Trickey, Charles Lemuel

Residence

Hanover, N. H. Manchester, N. H. Randolph, Mass. Hanover, N. H. Dover, N. H.

Room

The Hanover Inn 9 W. South St. 9 W. South St. 42 S. Main St.

41 S. Main St.

21 Allen St.

SECOND YEAR

Abbott, Charles Roger Anderson, Frank William, B.S. Bartlett, Walter Alonso Bostick, Warren John Davis, Stillman George Fiske, Eben Winslow, A.B. Forsaith, William Francis, A.B. Gage, Jesse Witherspoon, A.B. Grau, LeRoy Charles McGinnis, Henry James Royce, Clayton Elbert, A.B. Sanborn, Benjamin Eugene, Jr., A.B. Leavitts Hill, N. H. Shaw, Arthur Briggs, B.S. Smith, Morris Kellogg, A.B. Thorpe, Burton Durrell, A.B. Worthen, Thacher Washburn, A.B. Hanover, N. H. Young, George Yates, Jr.

Sanbornton, N. H. East Boston, Mass. Manchester, N. H. Thompsonville, Conn. Nashua, N. H. Waltham, Mass. Auburn, N. H. Manchester, N. H. North Adams, Mass. Waterville, Me. Woodstock, Vt. Joliet, Ill.

Hanover, N. H. Lisbon, N. H. 11 Webster Ave.

Hyde Park, Mass.

15 S. Main St. 23 N. Main St. Shurtleff House 3 Lebanon St. 21 School St. 4 School St. 25 S. Main St. 15 E. Wheelock St. 23 N. Main St. 9 W. South St. 15 S. Main St. 9 W. South St. 25 N. Main St.

9 School St.

23 N. Main St.

23 N. Main St.

FIRST YEAR

Atwater, Collins Barstow, Benjamin Beckett, Howard Poor Bonner, Clarence Alden Burt, Arthur Arannah Clarke, George Joshua Daly, Edmund Joseph Dunbar, Clarence Eugene Hanson, John Bennett Holzer, William Francis Leete, Edward Don Lewis, Frank Edward, A.B. Vivian, William James Wesley, John Willard Woodman, Arthur Beattie

Westfield, Mass. 18 Maple St. Kingston, Mass. 2 New Hubbard Peabody, Mass. The Tavern Lynn, Mass. 3 Bartlett St. Johnsbury, Vt. 19 W. Wheelock St. Jamaica, Vt. 9 S. Park St. 51 W. South St. Bayonne, N. J. Manchester, N. H. 47 Fayerweather 25 N. Main St. Warren, O. Arlington, N. J. 17 Thornton Concord, N. H. 5 College St. Auburndale, Mass. 25 N. Main St. · New Britain, Conn. 2 Sargent Rd. 19 W. Wheelock St. St. Johnsbury, Vt. Bath, N. H. 8 Lebanon St.





DARTMOUTH MEDICAL SCHOOL

1910-1911



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CALENDAR

| 1910 | | | |
|---|--|--|--|
| August 2 Third and Fourth year courses began. | | | |
| September 22, First and Second year courses began. | | | |
| November 24 Thanksgiving Day; a holiday. | | | |
| | | | |
| Recess from December 22, 10 A.M., to January 5, 10 A.M. | | | |
| 1911 | | | |
| January 23 to February 4 First semester examinations for First and Second year classes. | | | |
| February 22 Washington's Birthday; a holiday. | | | |
| March 14 Town election; a holiday. | | | |
| March 27 Third and Fourth year courses end. | | | |
| March 29 Graduating exercises. | | | |
| | | | |
| Recess from April 6, 10 A.M. to April 20, 10 A.M. | | | |
| June 8–22 Second semester examinations, First and Second year classes. | | | |
| August I Third and Fourth year courses begin. | | | |
| September 21 First and Second year courses begin. | | | |

FACULTY

- ERNEST FOX NICHOLS, D.Sc., LL.D., PRESIDENT.
- JOHN MARTIN GILE, A.M., M.D., Dean, and Professor of Clinical Surgery.

 I Maynard St.
- GEORGE SELLERS GRAHAM, B.L., M.D., SECRETARY, and Assistant Professor of Pathology and Bacteriology. Bridgman Block.
- HENRY MARTYN FIELD, A.M., M.D., Professor Emeritus of Therapeutics. Pasadena, Cal.
- CHARLES BEYLARD GUERARD DE NANCRÈDE, M.D., LL.D., Professor of Surgery and Clinical Surgery.

Ann Arbor, Mich.

- EDWIN JULIUS BARTLETT, A.M., M.D., Professor of Chemistry (Academic department). 8 W. Wheelock St.
- TILGHMAN MINNOUR BALLIET, A.M., M.D., Professor of Therapeutics. 3709 Powelton Ave., Philadelphia.
- WILLIAM PATTEN, Ph.D., Professor of Biology (Zoölogy), (Academic department). 15 Webster Ave.
- GILMAN DUBOIS FROST, A.M., M.D., Professor of Clinical Medicine.

 13 E. Wheelock St.
- COLIN CAMPBELL STEWART, A.M., Ph.D., Brown Professor of Physiology. 4 Webster Ave.
- HOWARD NELSON KINGSFORD, A.M., M.D., Professor of Pathology and Bacteriology. 6 Clement Road.
- GRANVILLE PRIEST CONN., A.M., M.D., Professor Emeritus of Hygiene. Concord, N.H.
- EDWARD COWLES, M.D., LL.D., Professor of Mental Diseases.

 419 Boylston St., Boston.
- GEORGE ADAMS LELAND, A.M., M.D., Professor of Otolaryngology. 354 Commonwealth Ave., Boston.

- JAMES RIDDLE GOFFE, M.D., Professor of Gynecology.
 - 616 Madison Ave., New York.
- ELLIOTT GRAY BRACKETT, M.D., Professor of Orthopedic Surgery.

 166 Newbury St., Boston.
- WILLIAM EDWIN BUTLER, LL.M., M.D., Professor of Medical Jurisprudence. 113 Halsey St., Brooklyn, N.Y.
- JOHN OSBORN POLAK, M.S., M.D., Professor of Obstetrics. 287 Clinton Ave., Brooklyn, N.Y.
- HARVEY PARKER TOWLE, A.B., M.D., Professor of Dermatology.

 453 Marlborough St., Boston.
- ALEXANDER QUACKENBOSS, A.M., M.D., Professor of Ophthalmology. 143 Newbury St., Boston.
- -----, Professor of Medicine and Clinical Medicine.
- JOHN HIRAM GEROULD, Ph.D., Assistant Professor of Biology (Zoölogy). (Academic department). 10 School St.
- CHARLES ERNEST BOLSER, Ph.D., Assistant Professor of Chemistry (Academic department). 15 E. Wheelock St.
- PERCY BARTLETT, A.B., M.D., Instructor in Anatomy.
 - 35 College St.
- ELMER HOWARD CARLETON, A.B., M.D., Clinical Instructor in Otolaryngology and Ophthalmology. 4 Occom Ridge.
- ----, Instructor in Anatomy.
- LEON BURR RICHARDSON, A.M., Assistant Professor of Chemistry (Academic department).
- ARTHUR HOUSTON CHIVERS, A.M., Instructor in Biology (Academic department). 15 E. Wheelock St.
- LELAND GRIGGS, Ph.D., Instructor in Biology (Academic department).

 11 Pleasant St.
- MORRIS KELLOGG SMITH, A.B., Demonstrator of Anatomy.

 13 W. Wheelock St.
- CHARLES ROGER ABBOTT, Demonstrator of Pharmacy.
 - 41 S. Main St.

GENERAL ANNOUNCEMENT

The Dartmouth Medical School, the fourth to be established in the United States, owed its foundation to the efforts of Dr. Nathan Smith, one of the best known physicians and surgeons of his day, who was appointed Professor of Medicine in Dartmouth College in 1798. In June, 1798, two men were granted the degree of M.B. and classes have been graduated every year since that date. The Doctorate in Medicine was first given in 1812.

Aside from the assistance of Dr. Lyman Spalding in 1798 and 1799, Dr. Smith carried on the whole work of the school until 1810. In that year Anatomy and Surgery were constituted a special department and this subdivision of the teaching work was followed by the gradual establishment of such other chairs as the changing conditions in medical education demanded. The required course of study, at first of two vears' duration, was soon lengthened to three years and more recently to four years. In 1902 the Trustees of Dartmouth College assumed entire financial control of the school, thus relieving it of the semiindependent position which it had previously held, and making it an integral part of the college as one of its graduate schools. In 1908 the Nathan Smith Laboratory was erected by funds contributed by alumni and friends of the school. The same fund made possible extensive alterations in the old medical building, erected in 1811 upon land deeded for this purpose to the State of New Hampshire by Dr. Smith. These alterations have provided excellent general and special working laboratories for the Department of Physiology. The Nathan Smith Laboratory affords admirable facilities for the work in Histology, Pathology, and Bacteriology, Biology, Comparative Anatomy, Embryology, and Chemistry are provided for in the laboratories of Dartmouth College. The Mary Hitchcock Hospital affords ample material for clinical instruction in the courses of the last two, or "clinical" years.

It is the aim of the school to impart to the student a thorough training in the theory and practice of medicine on both the laboratory and the clinical sides, an aim which is furthered by the small size of its classes and the consequent close personal association between teacher and student. To assure to the student the broad foundation necessary for acquiring a logical and thoroughly useful comprehension of modern medicine the school establishes with the beginning of the present session an entrance requirement of two years of collegiate work in Biology, Chemistry, Physics, and the languages.

EQUIPMENT

The original medical school building provides accommodations for the work of the Departments of Anatomy, Surgery, Medicine, and Physiology. It contains an anatomical museum and a pathological museum containing wax and plaster models, as well as wet preparations of gross pathological specimens. The dissecting room is extended from the south end of the building and is well lighted through a glass roof. There is always an abundance of material for work upon the cadaver.

The Department of Physiology occupies the entire three floors of the newly reconstructed north end of the building. Upon the ground floor there is a chemical room and a laboratory for special work by advanced students; on the second floor is a large private working laboratory, a dark room, toilet room, and a workshop; the entire third floor is occupied by the students' laboratory, which is well lighted from three sides. The equipment of the laboratory for the students' course is that manufactured by the Harvard Apparatus Company, but in addition to the students' sets there are many pieces of the more expensive demonstration apparatus and models, largely imported, which are equally available for the laboratory work of small classes.

The Nathan Smith Laboratory is a modern brick building of two and one-half stories. On the first floor there is a large lecture room and a library room. In the basement there is an animal room, a toilet room and a students' reading room. The upper floor contains a students' laboratory with gas and running water and with individual lockers for microscopes and slide boxes. The laboratory is abundantly lighted from three entire sides. This floor contains also the laboratory of the New Hampshire State Board of Health, and four smaller working laboratories. All the rooms are well lighted by closely placed windows and there is a full equipment of microscopes and other apparatus for general and special work in Histology, Pathology, and Bacteriology. The specimens coming to the State Laboratory for examination provide a great variety of pathological and bacteriological material for class use.

The College provides the laboratories of Culver Hall for work in the department of Chemistry, and the laboratories of Butterfield Museum for work in Biology, Comparative Anatomy, and Embryology. In these laboratories the medical students work in conjunction with advanced students of the academic department.

The Mary Hitchcock Memorial Hospital, a cottage hospital of forty beds, and a model of construction, furnishes clinical material for the use of the third and fourth-year classes with the opportunity for learning the methods of the most advanced hospital work. In operating rooms recently reëquipped with modern appointments the student has a close view of a large number of operations in general surgery and gynecology and of special operations upon the eye, ear, throat, and nose. He is able to follow these cases and note the after treatment and results. The clinics are carefully used to illustrate the didactic teaching.

It is the hospital center for a large part of New Hampshire and Vermont.

During the year 1909–1910 there were 826 admissions, of which 159 were medical cases and 667 surgical cases. Six hundred and eighty-eight surgical operations were performed, among which were 22 amputations; 135 appendectomies; 21 operations upon the gall bladder; 2 gastro-enterostomies; 41 hysterectomies; 47 operations upon the uterine appendages; 33 herniotomies; 2 nephrectomies; 37 ophthalmological operations, including enucleations, iridectomies, and extractions of cataract. Among the medical cases there have been diseases of the circulatory, respiratory, genito-urinary, and nervous systems, and other classes of disease. In the out-patient department there were 125 operations on the ear, nose, and throat; 27 operations on the eye; and 333 unclassified minor operations, dressings, etc.

Because the classes are small each student has the opportunity before graduating of receiving personal instruction at the bedside, of assisting in operations, and of giving ether. They are divided into small groups which follow up the cases and do the dressings under direction. They are taught physical diagnosis at the bedside and in the examining room. They make blood and urine tests of patients who are under their daily observation. The diagnosis, prognosis, and after history of these cases are discussed freely and in detail with the classes by the Instructors.

The appointment of a recent graduate as house officer is made every six months, and the position affords full and valuable experience. The terms of service begin on April first and October first and continue one year.

The College maintains a small but well-equipped Isolation Hospital. It affords a valuable opportunity for studying and following the contagious diseases. One or two advanced students serve each year as internes.

ENTRANCE REQUIREMENTS

The minimum requirement for admission to Dartmouth Medical School is represented by two years of College work, involving the study for at least one year each of Chemistry, Biology, Physics, either French or German, and either Latin or the other modern language. Applicants must also demonstrate their ability to translate at sight easy Latin prose.

Candidates may pursue this Collegiate preparatory work in Dartmouth College and meet the requirements of the Medical School by presenting the following courses:

Biology, I, 2, Botany 3 and Zoölogy 4.

Chemistry 3 and 4.

Physics I and 2.

French, two years, with either German or Latin one year, or German, two years, with either French or Latin one year, together with additional electives to make a total of fifteen hours in each semester.

Candidates entering from other Colleges must present equivalent courses.

Those who wish to meet the requirements of the Medical School and at the same time receive credit for two years' work in Dartmouth College may do so by pursuing the following schedule:

FRESHMAN YEAR.

Biology I and 2.
English I and 2.
Mathematics I and 2 (or
Physics I and 2, if Advanced Mathematics has been presented for admission).

Physical Education.
and two different languages of:
Latin, six hours.
French, six hours.
German, six hours.

SOPHOMORE YEAR.

Botany 3 and Zoölogy 4. Chemistry 3 and 4. Physics 1 and 2 or 3 and 4. History 1 and 2. and continue either: French, six hours, or German, six hours. Candidates who wish to receive credit for four years' work and the degree of B.S. from Dartmouth College, and to complete the course for the medical degree by the end of the sixth year, may meet the requirements for both courses by registering in the Medical Department at the beginning of the Junior year in College, and electing the work of the first two years in the Medical School, together with a minor in group III. For this minor it is recommended that the choice be made from Sociology, Economics, and Philosophy.

The combined course for the two degrees is as follows:

FRESHMAN YEAR IN DARTMOUTH COLLEGE:

Biology I and 2.
English I and 2.
Mathematics I and 2 (or
Physics I and 2, if Advanced Mathematics has
been presented for admission).

Physical Education.
and any two of:
Latin, six hours.
French, six hours.
German, six hours.

SOPHOMORE YEAR IN DARTMOUTH COLLEGE:

Botany 3 and Zoölogy 4. Chemistry 3 and 4. Physics I and 2, or 3 and 4. History I and 2. and continue one of:
French, six hours, or
German, six hours.

JUNIOR YEAR IN DARTMOUTH COLLEGE AND FIRST YEAR IN MEDICINE:

Zoölogy 9 and 10. Chemistry 5 and 7 (8b). Physiology 1 and 2. Anatomy 1 and 2. Histology 1 and 2. with Sociology I and 2, or Economics I and 2, or Philosophy I and 2.

SENIOR YEAR IN DARTMOUTH COLLEGE AND SECOND YEAR IN MEDICINE:

Chemistry (Physiol. and Med.).
Physiology 3 and 4.
Bacteriology 1 and 2.
Together with Anatomy
(including dissection),
Pathology and Materia Medica.

and continue one of:
Sociology 3 and 4, or
Economics 3 and 4, or
Philosophy 3 and 4.

THIRD YEAR IN MEDICINE:

Regional Anatomy, Minor Surgery, Pathology, Obstetrics, Surgery, Medicine, Therapeutics, Physical and Differential Diagnosis, Gynecology, Psychiatry, Pediatrics, Medical Jurisprudence, Ophthalmology, Dermatology, Laryngology, Otology.

FOURTH YEAR IN MEDICINE:

Therapeutics, Surgery, Medicine, Obstetrics, Gynecology, Psychiatry, Medical Jurisprudence, Hygiene, Ophthalmology, Laryngology, Otology, Dermatology, Pediatrics, Orthopedics.

Candidates for the A.B. degree can as heretofore matriculate in the Medical School at the beginning of senior year provided they present the requirements in Chemistry, Biology, and Physics. They can thus earn the degree of A.B. in four years and the degree of M.D. in three years more.

Students desiring to pass from the Academic Department of the College to the Medical School must bring the certificate of the President of the College, with his approval of such transfer.

ADVANCED STANDING

Applicants for advanced standing must satisfy the requirements for admission; must bring official evidence of time spent in medical schools with equivalent entrance requirements; and must either present official certificates of standing in the courses to be accepted or pass examinations in the subjects of the medical curriculum in which the class which they wish to enter has been examined.

DETAILED STATEMENT OF ENTRANCE REQUIREMENTS.

The following extracts from the college catalogue are descriptive of those courses in the academic department of this college mentioned above as covering the required field of preparation for entrance into the medical school. Equivalent courses pursued at other colleges of approved standing will be accepted upon proper certification. The academic courses carried during the two intermediate years of the six-years' course are also described.

No description is given of the courses in Latin and the modern languages. These departments offer a wide range of electives. No beginners' course is offered by the college in Latin.

ENGLISH

I and 2. English Composition and Rhetoric.

First and Second Semesters, 3 hrs.

An introduction to the study of Rhetoric, with the preparation and criticism of themes, and constant reference to printed examples of correct and incorrect style. (Pearson's Principles of Composition, Hill's Principles of Rhetoric, Newcomer's Elements of Rhetoric, Lamont's English Composition.)

BIOLOGY

ZOÖLOGY AND BOTANY

1. Elementary Biology (Botany).

First Semester, 3 hrs.

An introductory course giving a general survey of the vegetable kingdom. The lectures treat of the physiology, morphology, and reproduction of plants, and of the relation of fungi and bacteria to fermentation, putrefaction, and disease. The laboratory work consists largely of the microscopic examination of some of the principal representatives of the vegetable kingdom,

2. Elementary Biology (Zoölogy).

Second Semester, 3 hrs.

An introduction to the study of animal life. The structure of a series of typical animals is studied in the laboratory. The lectures supplement the laboratory work on animal forms and relationships and treat of the physiology, habits, life histories, and economic importance of animals. (Jordan, Kellogg, and Heath's *Animals*.)

5. Cryptogamic Botany.

First Semester, 3 hrs.

A course on the lower plants, treating of the classification, structure, activities, and life histories of typical representatives of the various orders, attention being paid to those forms that are of pathogenic or of economic interest, and to the making of artificial cultures and culture media.

4. Comparative Anatomy of Vertebrates.

Second Semester, 3 hrs.

The outlines of the classification of vertebrates, the homologies, and the histological structure of vertebrate organs, the theories of the structure of the vertebrate head, and of the derivation of the Chordata will be discussed. The object of the course is to illustrate the evolution of the vertebrate type of animals from the lowest fishes and related forms up to man and to discuss some of the conditions that are coincident with, or determine, the progressive modification of various vertebrate organs. The course is intended for those especially interested in Zoölogy, or for those who wish to lay a broad foundation for the study of human anatomy, physiology, or comparative psychology. (Wiedersheim's Comparative Anatomy of Vertebrates, Gray's Anatomy.)

MATHEMATICS

I. Algebra.

First Semester, 3 hrs.

Quadratic equations, ratio and proportion, variation, series, binomial formula, logarithms, permutations and combinations, theory of equations, graphic algebra, determinants of the second and third orders. (Wells's College Algebra.)

2. Solid Geometry and Plane Trigonometry.

Second Semester, 3 hrs.

- (a) Solid Geometry, with original demonstrations, and the solution of problems relating to the surfaces and volumes treated.
- (b) Plane Trigonometry, with applications to problems in surveying. (Phillips and Strong.)

PHYSICS

I and 2. General Physics.

First and Second Semesters, 3 hrs.

A study of the phenomena and simpler laws of Mechanics, Sound, Heat, Electricity, Magnetism, and Light. Instruction is given by lectures with an ample number of illustrative experiments, by recitations and frequent examinations upon the lectures and text-book assignments. Text, Crew's General Physics.

3. Practical Physics.

First Semester, 3 hrs.

A course in the theory and use of instruments of precision and in the experimental verification and application of physical laws. In particular, the micrometer and vernier calipers, the spherometer, and the micrometer eyepiece are used for measuring length; the seconds clock, stop-watch, chronograph, and tuning-fork for measuring time; spring, pan and analytical balances, and inertia methods for measuring mass; the laws of the pendulum and of falling bodies are used to determine "g"; the laws of forces, moments, moments of inertia, centers of mass, Hooke's, Boyle's, and Charles's laws are verified; the densities of solids and liquids are measured in a number of ways; the laws of vibrating strings, the measurement of the period, wave-length, and velocity of propagation of wave disturbances in different media are determined.

While care in manipulation and accuracy of observation are required of the student, it is also essential that he understand thoroughly the principles involved in the experiments. Oral reviews and tests will be held at convenient intervals to determine to what extent these principles have become a part of the student's knowledge.

A laboratory manual (Gilbert) will be used by the student; other texts will be consulted.

4. Practical Physics.

Second Semester, 3 hrs.

A continuation of Course 3, extended into the study and experimental verification of the general laws of Heat, Electricity, Magnetism, and Light.

In Heat, experiments are performed in the study of thermometers, in calorimetry, in the expansion, due to heat, of solids, liquids, and gases, and in the measurement of specific and latent heats.

In Electricity and Magnetism, the exercises include the mapping of magnetic fields and lines of current-flow, the measurement of the strength of magnetic fields, electrostatic capacities, the resistance of wires, batteries, and galvanometers, the electromotive force of batteries, galvanometer factors, the electrochemical equivalent of hydrogen, the mechanical equivalent of heat, the efficiency of a motor and of a generator, and the use of the D'Arsonval, Thomson and tangent galvanometers, and of ammeters and voltmeters.

In Light, the laws of photometers and mirrors, the measurement of the focal length and magnifying power of lenses and combinations of lenses, the index of refraction of glass, the spectra of a number of substances, the wave lengths of light, and the simple laws of polarization and double refraction are determined or verified.

PHYSICAL EDUCATION

I and 2. Physical Education.

First and Second Semesters, 1 hr.

A course of lectures on physical education, combined with practical work in the gymnasium, for the Freshman class. The lectures will cover the gross human anatomy, physiology of muscular exercises, personal hygiene, dietetics, etc.; in general, sanitary and moral prophylaxis. The lectures will be given the first part of the first semester and the last part of the second; the work in the gymnasium occurs in the middle of the College year; the examination for the entire work of the year takes place at the close of the second semester.

CHEMISTRY

2. Chemistry of the Non-Metallic Elements.

Second Semester, 3 hrs.

Lectures, recitations, and laboratory work. In this course special emphasis is laid upon the general principles of Chemistry, the Notation

in its experimental and arithmetical meaning, upon Nomenclature and Terminology in their applications. Some familiarity with the properties of chemical substances and with processes is acquired. A beginner's course, open to students who have had no chemistry in their preparation for College.

3. Metallic Elements and their Compounds.

First Semester, 3 hrs.

This course reviews rapidly the groundwork preparatory to the study of the more difficult compounds of the non-metallic elements and continues the study of these elements and the metals by lectures, recitations (Newth's *Inorganic Chemistry*), and by Qualitative Analysis in the laboratory. It divides the time about equally between one-hour recitations and two-hour laboratory exercises. Open to all students who have passed Course 2, or its equivalent.

Entrance Physics, or Physics 1, is a desirable foundation for this course.

4. Continuation of Course 3.

Second Semester, 3 hrs.

The study of the Metals and their compounds is completed, and more complex problems of Qualitative Analysis are introduced. Practice in Arithmetical calculations.

HISTORY

I and 2. Mediæval and Modern European History.

First and Second Semesters, 3 hrs.

Courses numbered I and 2 are treated as a continuous year's course in European History from 375 to 1870 A. D. A detailed outline of the lectures, the map and written work, and the recitations on lectures, text-books, and collateral reading will be found in Foster and Fay's Syllabus of European History, 375–1870 A. D. (Third Edition). In addition to the recitations, the work will be tested by conferences with the instructors and by short written quizzes at the lecture or recitation. A minimum amount of collateral reading is required of all, but it is hoped that the student's interest will lead him into independent reading beyond any requirements. Lectures, recitations, and readings.

ECONOMICS

I and 4. Elementary Economics.

First and Second Semesters, 3 hrs.

In these two courses the attempt is made to give the student the currently accepted scientific analysis of modern industrial society. They seek to accomplish a threefold purpose: to teach fundamental principles in such a way that they may be applied to the duties of enlightened citizenship; to open up the general field of Economics in the way most helpful for further more detailed and extensive study in the same field; and to offer to those intending to adopt business as a profession such general rules and principles as are contributed to business by the science of Economics.

3. Evolution of Industrial Society.

First Semester, 3 hrs.

A sketch of the development of industrial society which traces the steps in economic progress and lays a basis for an appreciation of present-day industrial life. Particular attention is given to English economic development. Lectures, text-book, and collateral readings. (Gibbins's Industry in England: Historical Outlines.)

4. Economic History of the United States.

Second Semester, 3 hrs.

The development of the United States, both industrial and commercial, is treated in the form of lectures, the relation of economic to social and political factors being constantly noted. The following are some of the topics considered: the land policy of the government, the movement of population, and the development of agricultural resources both North and South, including the economic effects of slavery; the origin and development of the extractive and manufacturing industries; transportation development, including turnpikes, canals, and railroads; and a sketch of commercial development, including a brief history of protectionism. Lectures, text-books, and collateral readings. (Callender's Selections from the Economic History of the United States.)

SOCIOLOGY

1. Ethnology.

First Semester, 3 hrs.

This course should be taken by those who expect to take the following courses in this department. It is a study of the place of man in Nature and of the races and varieties of mankind. Recitations and lectures.

2. Historical Sociology.

Second Semester, 3 hrs.

This course is devoted to the study of the development of the fundamental social institutions as expressions of folk habits and customs. Recitations and lectures.

3. Biological Sociology (Vital Phenomena).

First Semester, 3 hrs.

This course treats of man's adjustment to his natural environment and of the way in which it determines his mode of life and his institutions, with particular reference to climatic conditions and problems of tropical colonization. It is the Biology of population, involving a study of birth rates, death rates, and kindred phenomena by the Statistical method. Lecture course.

4. Anthropological Sociology (Social Phenomena).

Second Semester, 3 hrs.

Its subject is the social life of today, particularly in America. It investigates the statistics of social conditions and social groups. This involves a study of Social Classes, Crime, Pauperism, and Social Reform.

PHILOSOPHY

I. Psychology.

First Semester, 3 hrs.

An elementary course. Outlines of the science. Description and explanation of the phenomena of the mental life. Lectures, quizzes, reports, and readings.

2. Logic.

Second Semester, 3 hrs.

An introductory course. A study of the outlines of deductive and inductive reasoning with especial reference to fallacies, argumentation, the nature of thought, and the logic of certainty and probability. Recitations, reports, and readings.

3. Advanced Logic.

First Semester, 3 hrs.

The Science of Thought. This course considers not the conditions under which valid thinking is possible, but the nature of thinking itself. It is the purpose of the courses in Logic to consider the place of thought in reality. Recitations, readings, reports, and a thesis. Course 3 presupposes either Course 1 or 2. (Everett's Science of Thought.)

4. Advanced Psychology.

Second Semester, 3 hrs.

This course is a natural continuation of Philosophy I, which it presupposes. Special attention will be paid to abnormal psychic phenomena. It is the purpose of the courses in Psychology to acquaint college men with the essential elements of their own conscious life and with the general constituents of human nature. Recitations, readings, reports, and a thesis.

COURSE OF STUDY

The One Hundred and Fourteenth Annual Course opened on Tuesday, the second day of August, 1910.

For the third and fourth-year classes the session which began on August second will continue to March twenty-ninth, 1911. For the first and second-year classes, the session which began on September twenty-second, 1910, will continue nine months to June twenty-second, 1911.

The teaching is by lectures, recitations, laboratory work, and clinics. Students of the third and fourth years are kept in close touch with hospital work and have daily bedside instruction.

For the first and second-year classes the major part of the student's time is spent in the laboratories of the several departments, but this practical work is supplemented by lectures and quizzes and by constant recitation work.

For the third and fourth-year classes the course is so arranged that instruction in the special departments may be given by non-resident members of the teaching staff. During the course in each of the specialties there is provided a large amount of interesting clinical material which may be used to supplement and illustrate the didactic teaching. In most of the special subjects two examinations are held, one for the third-year class and a final examination for the · fourth-year class. There is free access to the clinical subjects by the fourth-year men, who are required to take case histories, conduct special physical examinations, and in many cases, to perform such minor operations as tonsillotomies, etc. The period from August second to September twenty-second is occupied wholly by the work under non-resident teachers. From September twenty-second to March twenty-seventh, the morning is occupied by recitation work in the fundamental courses in general medicine and surgery while the afternoon is devoted to clinics and to work in the clinical laboratory and in the wards. During this period there is also afternoon work in the specialties until these courses are completed. Members of the fourth-year class are required throughout the year to take histories in the wards and to follow and report upon assigned patients.

SCHEDULE

FIRST YEAR-FIRST SEMESTER

Biology 9, (Embryology). Tuesday, Thursday, Saturday, 8-10 A. M. Histology 1. Monday, Wednesday, Friday, 8-10 A. M. Anatomy 1. Tuesday, Thursday, Saturday, 10-11 A. M. Physiology 1. Monday, Wednesday, Friday, 11-12 A. M. Chemistry 5. Monday, Wednesday, Friday, 1-3 P. M.

FIRST YEAR—SECOND SEMESTER

Histology 2. Monday, Wednesday, Friday, 8–10 A. M. Biology 10. Tuesday, Thursday, Saturday, 8–10 A. M. Anatomy 2. Tuesday, Thursday, Saturday, 10–11 A. M. Physiology 2. Monday, Wednesday, Friday, 11–12 A. M. Chomistay, R. (%). Two hour paried in laboratory, four

Chemistry 7 (8b). Two hour period in laboratory, four afternoons each week. Thursday lecture or recitation, 11-12 A. M.

SECOND YEAR—FIRST SEMESTER

Physiology 3. Monday, Wednesday, Friday, 8-10 A. M. Bacteriology 1. Tuesday, Thursday, Saturday, 8-10 A. M. Anatomy. Monday, Wednesday, Friday, 10-11 A. M. Pathology. Tuesday, Thursday, Saturday, 10-12 A. M. Medical Chemistry. Tuesday, Thursday, I-3 P. M. Tuesday. Lecture or recitation, 3-4 P. M. Dissection. Monday, Wednesday, Friday, I-4 P. M.

SECOND YEAR—SECOND SEMESTER

Physiology 4. Monday, Wednesday, Friday, 8-10 A. M.

Bacteriology. Tuesday, Thursday, Saturday, 8–10 A. M. for first ten weeks.

Hematology. Tuesday, Thursday, Saturday, 8-10 A. M., for four weeks.

Urinalysis. Tuesday, Thursday, Saturday, 8-10 A. M., for four weeks.

Anatomy. Monday, Wednesday, Friday, 10–11 A. M. Pathology. Tuesday, Thursday, Saturday, 10–12 A. M. Dissection. Monday, Wednesday, Friday, 2–5 P. M.

Medical Chemistry. Tuesday, Thursday, 1-3 P. M. Materia Medica. Monday, Wednesday, Friday, 1-2 P. M.

THIRD YEAR-SEPTEMBER 22 TO MARCH 27

Physical Diagnosis. Monday, Tuesday, Wednesday, Friday, Saturday, 8-9 A. M.

Anatomy. Monday, Wednesday, Friday, 9-10 A. M.

Medicine. Tuesday, 9-10; Thursday, 8-9; Friday, 10-11 A. M.

Obstetrics. Thursday, Saturday, 9-10 A. M.

Diseases of Nervous System. Monday, Wednesday, 10-11 A. M.

Gynecology. Thursday, 10-11 A. M.

Surgical Clinic. Tuesday, Saturday, 10-11 A. M.

Medical Clinic. Monday, Wednesday, Friday, 11-12 A. M.

Minor Surgery. Tuesday, Thursday, Saturday, 11-12 A. M.

Dissection. Tuesday, Thursday, I-4 P. M.

Ward work or special clinics. Monday, Friday, 1-4 P. M.

Clinic in Otolaryngology or Ophthalmology. Wednesday, 2-4 P. M.

THIRD AND FOURTH YEAR—LECTURE COURSES

Surgery. August 2-September 15, 9-10, and 11-12 each day. Clinic. Tuesday, Thursday, 2.30-5.00 P. M.

Therapeutics. August 2-September 15, 8-9, and 10-11 each day.

Otolaryngology. August 2-August 13, 1.30-2.30 each day.

Clinic. Monday, Wednesday, Friday, 2.30-5.00 P. M.

Dermatology. September 5-September 20, 1.30-2.30 each day. Clinic. Monday, Wednesday, Friday, 3.30-5.30 P. M.

Gynecology. September 12-September 24, 2.30-3.30 each day.

Clinic. Tuesday, Thursday, 3.30-5.30 P. M.

Psychiatry. September 19-September 30, 1.30-2.30 each day. Clinics by appointment.

Obstetrics. September 30-October 15, 2.30-3.30 each day. Clinics by appointment.

Ophthalmology. October 10-October 22, 1.30-2.30 each day. Clinic. Monday, Wednesday, Friday, 2.30-5.00 P. M.

Medical Jurisprudence. September 26-October 8, 1.30-2.30, or 2.30-3.30 P. M. each day.

Orthopedics. December 5-December 17, 1.30-2.30 each day. Clinic. Monday, Wednesday, Friday, 2.30-5.00 P. M.

Hygiene. February 6-February 17, 1911, 1.30-2.30 each day.

2-5 P. M.

FOURTH YEAR—SEPTEMBER 22 TO MARCH 27

Pediatrics. Tuesday, Saturday, 8-9 A. M.
Surgery. Monday, Wednesday, Friday, 9-10 A. M.
Medicine. Tuesday, 9-10; Thursday, 8-9; Friday, 10-11 A. M.
Obstetrics. Thursday, Saturday, 9-10 A. M.
Diseases of Nervous System. Monday, Wednesday, 10-11 A. M.
Gynecology. Thursday, 10-11 A. M.
Gynecological Clinic. Thursday, 11-12 A. M.
Surgical Clinic. Tuesday, Saturday, 10-12 A. M.
Medical Clinic. Monday, Wednesday, Friday, 11-12 A. M.
Clinic in Otolaryngology or Ophthalmology. Wednesday, 2-4 P. M.
Ward work or special clinic. Monday, Tuesday, Thursday, Friday,

COURSES OF INSTRUCTION

ZOÖLOGY

PROFESSORS PATTEN AND GEROULD

FIRST YEAR

Vertebrate Embryology. A study of the Embryology of the frog, the chick, and a mammal. (Bailey and Miller's Text Book of Embryology, Minot's Human Embryology, Hertwig's Embryology of Vertebrates, Heisler's Embryology). First semester, fifty-four two-hour exercises.

PROFESSOR PATTEN.

Comparative Anatomy and Physiology of the Nervous System and Sense Organs.

A course of lectures and laboratory work illustrating the structure and evolution of the nervous system and sense organs, with special reference to their physiology. A desirable course for students of medicine or psychology. Open to students who have taken Courses I and 2. (M'Kenrick and Snodgrass' *Physiology of the Senses*, Burkholder's *Anatomy of the Brain*.) Second semester, three hours.

PROFESSOR GEROULD.

ANATOMY

DOCTOR FROST, DOCTOR P. BARTLETT

FIRST YEAR

Osteology, Arthrology, and a preliminary study of the viscera. A course of recitations and demonstrations. Preparations from the Anatomical Museum are given out for study. An opportunity is offered to follow the dissections of the human body made by the men of the Second and Third classes. The written examinations covering the work in Osteology and Anthrology are final if satisfactory. (Cunningham's Anatomy.) First and second semesters, one hundred and four exercises.

SECOND YEAR

Studies of the muscles, blood vessels, lymphatics, and nerves by systems and by regions. Recitations and occasional lectures. Demonstrations by the instructor from manikins, plates, dried and wet preparations, and the cadaver. Dissection and demonstration of at least two parts by each student to the class. (Cunningham, Gray, Gerrish.)

DR. P. BARTLETT.

THIRD YEAR

Study of the central nervous system and the viscera. Regional and applied Anatomy. Lectures, recitations, and demonstrations. Dissection and demonstration of the remaining parts by the student. (Cunningham, Treves, Spalteholz.)

Doctor Frost.

PHYSIOLOGY

PROFESSOR C. C. STEWART

FIRST YEAR

- 1. A course of lectures, with demonstrations and occasional quizzes on the physiology of muscle and nerve, circulation, respiration, and animal heat. First semester, fifty-four exercises.
- 2. A continuation of Course I, on the physiology of digestion, metabolism, secretion, and excretion, the nervous system, and the special senses. Second semester, fifty-four exercises.

SECOND YEAR

- 3. The work of the second year will consist of laboratory exercises with demonstrations, recitations, and occasional lectures on the physiology of muscle and nerve, blood, circulation, respiration, and animal heat. A short experimental course on the physiological action of drugs is included. First semester, fifty-four exercises of two hours each.
- 4. A continuation of Course 3, taking up in the same way the physiology of digestion, metabolism, secretion and excretion, the nervous system, and the special senses.

The equipment of the laboratory provides a satisfactory set of apparatus for each two students. The set includes a clockwork kymograph, inductorium, moist chamber, recording and stimulating apparatus, tambours, circulation model, and many minor pieces; while for the work in chemical physiology a complete outfit of glassware, apparatus, and chemicals is provided. In addition to this the laboratory contains apparatus for demonstrations and for individual work or original investigation. Both the students' sets and the equipment of the general laboratory are being added to from time to time as the needs of the work direct.

THIRD YEAR

A course of twelve lectures on special subjects in advanced Physiology.

CHEMISTRY

PROFESSORS E. J. BARTLETT, BOLSER, AND RICHARDSON

FIRST YEAR

Organic Chemistry. The chemistry of the carbon compounds. Two thirds of the exercises are recitations and lectures and one third are laboratory exercises. The object of the course is to ground the student in fundamental theory and to acquaint him with laboratory method.

Professor Bolser.

Quantitative Analysis. A course in the laboratory arranged from standard text and reference books. Elementary gravimetric and volumetric methods. This course requires as a minimum the equivalent of seventy-two exercises of two hours each.

PROFESSOR BARTLETT.

SECOND YEAR

Physiological and Medical Chemistry. A course with laboratory, lecture, and recitation work giving special attention to the carbohydrates and albumens, to Toxicology, the Chemistry of the body, and the applications of Chemistry to Medicine. First and second semesters.

PROFESSOR BARTLETT.

HISTOLOGY, BACTERIOLOGY, AND PATHOLOGY

PROFESSORS KINGSFORD AND GRAHAM

FIRST YEAR

I. Histology. Laboratory work with occasional lectures and quizzes. The study of the microscopic anatomy of the animal cell, of the fundamental mammalian tissues, and of the organs; together with practical work by the individual student in the methods for preparing and staining sections. Each student will receive a complete collection of slides for preservation. First semester, fifty-four laboratory periods with quiz hours as they can be arranged.

PROFESSOR GRAHAM.

2. Histology. A continuation of Course I, completing the study of the great organ systems, including the central nervous system and the special sense organs. Second semester, fifty-four laboratory periods, with quiz hours as they can be arranged.

PROFESSOR GRAHAM.

SECOND YEAR

- 3. Bacteriology. Lectures and laboratory work with occasional quizzes. Each student will prepare the various culture media, and will carry out practical work in the methods of air, water, and milk examinations, and the isolation and identification of the more common pathogenic organisms, demonstrating the cultural reactions of such organisms before the class. Special stress will be laid upon the acquirement of the technique involved in the laboratory diagnosis of the bacterial diseases and upon the study of Immunity. Eight hours in the laboratory each week during the second semester, with lecture hours as they can be arranged.

 PROFESSOR GRAHAM.
- 4. Pathology. Six hours each week of laboratory work throughout the year. Lectures, three times each week, illustrated by demonstrations of gross lesions, two hours' recitation. The laboratory work is devoted to the study of the pathological histology of inflammation, the infectious diseases, tumors, etc. The sections may be prepared and retained by the student.

 PROFESSOR KINGSFORD.

5. Hæmatology. Two lectures and one recitation, with two hours of laboratory work each week until November first. A course in the examination, preparation, and staining of blood specimens, with special reference to clinical diagnosis. Both normal and pathological blood specimens are available for examination and study.

PROFESSOR KINGSFORD.

6. Urinary Examinations. Four hours of laboratory work and three hours of lectures and recitations each week from April first to June eighteenth. This course deals with the examination of normal and pathological urines, with special relation to the full study of urinary sediments. An abundance of material is available at all times.

PROFESSOR KINGSFORD.

THIRD YEAR

7. Pathology. One hour each week, taking up special subjects with demonstrations. Professor Kingsford.

As the Medical School affords accommodation to the State Laboratory of Bacteriology, the supply of pathological and bacteriological material accessible throughout the year is unusually large. Each student has an opportunity to act as voluntary assistant for a period of four weeks, and thus may obtain special training in bacteriological and pathological technique and in general laboratory methods.

MATERIA MEDICA AND THERAPEUTICS

PROFESSOR BALLIET AND DR. P. BARTLETT

SECOND YEAR

r. Materia Medica and Pharmacy. A recitation course of three hours each week during the second semester, and in addition to the recitations, a short course in practical pharmacy demonstrating the pharmaceutical processes, the pharmacopoeial preparations, and the compounding of prescriptions. Practical work in pharmacodynamics is included in the work of the second year course in Physiology.

DR. BARTLETT.

THIRD AND FOURTH YEARS

2. Therapeutics. A course of sixty lectures with frequent quizzes and illustrations by the study of clinical cases at the hospital.

PROFESSOR BALLIET.

OBSTETRICS

PROFESSOR POLAK AND DR. FROST

THIRD AND FOURTH YEARS

- 1. A course of fifteen lectures illustrated by diagrams and the use of manikins.

 PROFESSOR POLAK.
- 2. Recitations with section work upon manikins by the student, two hours each week. Dr. Frost.

Preparation is thus secured for a course in the Out-patient department of a Lying-In Hospital which the student is advised to take during the vacation at the end of the third year. Evidence of attendance upon eight cases of confinement is required of candidates for the degree.

3. Maternity cases are received at the Hospital, and when possible they serve to illustrate to the students in small sections the teaching and methods of obstetrics.

GYNECOLOGY

PROFESSOR GOFFE AND DR. GILE

THIRD AND FOURTH YEARS

- I. A course of twenty-four lectures illustrated by diagrams, supplemented by clinical teaching at the Hospital. The students make examinations of the cases presented and follow the operations and after-treatment.

 PROFESSOR GOFFE.
- 2. Recitations once a week supplemented by further clinical instruction at the Hospital through the year. Clinical material is abundant.

DR. GILE.

SURGERY

PROFESSORS DE NANCRÈDE AND GILE, AND DOCTOR P. BARTLETT

THIRD YEAR

I. A course in Minor Surgery given partly in the recitation room and partly at the Hospital with additional practical work upon the cadaver. Demonstrations and quizzes. Three hours each week.

DR. P. BARTLETT.

THIRD AND FOURTH YEARS

2. A course of seventy-two lectures supplemented by many clinical lectures and operations at the Hospital. The student is given cases to examine and study, and makes his report before the class.

Professor de Nancrède.

FOURTH YEAR

3. A course of recitations with further clinical lectures and study of individual cases by the student at the Hospital. Three hours each week.

PROFESSOR GILE.

MEDICINE

PROFESSORS FROST AND -----, AND DOCTOR GILE

THIRD YEAR

- I. Physical Diagnosis. Study of methods of examination and physical diagnosis, with enough of pathology to make the variations in the physical signs intelligible. About one-third of the course is given to lectures, one-third to recitations, and one-third to clinics. Five hours each week.

 DR. GILE.
 - 2. Medicine. Lectures and recitations six hours each week.

PROFESSOR FROST.

THIRD AND FOURTH YEARS

3. Medicine. A course of lectures illustrated by the study of clinical cases at the Hospital. Professor———,

FOURTH YEAR

4. Medicine. Lectures and recitations with clinical examinations at the Hospital through the year. Six hours each week, with one or two hours additional each week of clinical examination at the Hospital.

Professor Frost.

- 5. Diseases of children. Two recitations and one hour of clinical work each week.

 Professor Frost.
- 6. Diseases of the Nervous System. Two recitations and one hour of clinical work each week.

 Professor Frost.
- 7. Medicine. Ward work. Several hours of ward work each afternoon from about September 22 to about March 29. The work includes the taking of case histories, and the actual performance of the diagnostic tests of the clinical laboratory.

PROFESSORS KINGSFORD, FROST AND GILE.

OPHTHALMOLOGY

PROFESSOR QUACKENBOSS, DR. CARLETON

1. A course of twelve didactic lectures in the third and fourth years with many clinical lectures and operations before the class. An excellent opportunity is afforded each student to study these cases.

Professor Quackenboss.

2. Clinical Ophthalmology. A weekly clinic throughout the year excepting during the continuance of the above lecture course.

DR. CARLETON.

LARYNGOLOGY AND OTOLOGY

PROFESSOR LELAND AND DR. CARLETON

- I. A course of ten didactic lectures with clinical lectures and many operations before the class. Laryngology and Otology are considered in alternate years. Opportunity to study and follow the treatment of individual cases.

 PROFESSOR LELAND.
- 2. Clinical Otolaryngology. A weekly clinic throughout the year excepting during the continuance of the above course. Dr. Carleton.

MEDICAL JURISPRUDENCE

PROFESSOR BUTLER

Separate courses of twelve didactic lectures each in the third and fourth years, expounding the relations of Law to Medicine in the various departments of municipal government and medical practice.

PSYCHIATRY

PROFESSOR COWLES

A course of twenty-four didactic lectures in two successive years, covering the following topics:

- 1. The principles of mental pathology and the nature of mental symptoms.
- 2. Mental physiology. Imperative ideas and psychological automatism.
- 3. Laws of the nervous and mental mechanism; the organic sensations in mental pathology; and the psychology and pathology of the emotions; the mental symptoms of nervous exhaustion.
 - 4. Forms of mental diseases.

DERMATOLOGY *

PROFESSOR TOWLE

A course of twenty-four didactic lectures in two successive years. It is intended to make this course a practical one with special attention to the most common diseases of the skin. The lectures will be illustrated by photographs and supplemented by clinical demonstration.

ORTHOPEDIC SURGERY

PROFESSOR BRACKETT

Courses of twelve lectures each in the third and fourth years. Didactic consideration of the diseases and deformities of bones, joints, and muscles, illustrated by photographs, radiograms, and models, and by the study of clinical cases at the hospital.

HYGIENE

DOCTOR KINGSFORD

A course of twelve didactic lectures, giving instruction in the principles of hygiene and sanitation as applied to daily life and to the practice of medicine and surgery. The course includes the discussion of problems in ventilation and disinfection of buildings, care of water supply, food supplies, plumbing, and sewage disposal; and covers the general field of municipal and school hygiene.

The hygiene and sanitation of the College and of the Hanover water and milk supply, and the college isolation hospital, are under the care of Dr. Kingsford as Medical Director, who thus is enabled to make use in the course of unusual opportunities for demonstrating general principles and modern methods in actual operation.

TEXT-BOOKS

Anatomy — Cunningham, Spalteholz, Piersol, Treves, Quain.

BACTERIOLOGY — Jordan, McFarland, Williams.

CHEMISTRY - Remsen, Holland.

COMPARATIVE ANATOMY — Parker and Haswell.

DERMATOLOGY — Stelwagon, Pusey, Jackson, Van Harlingen.

DICTIONARY — Gould, Dunglison, Dorland.

DISEASES OF CHILDREN - Holt.

DISEASES OF NERVOUS SYSTEM - Osler, Church and Peterson.

Embryology — Bailey and Miller.

GYNECOLOGY — Pryor, Bovee, Penrose.

HÆMATOLOGY — Cabot, Ewing.

HISTOLOGY — Piersol, 8th Ed., Bailey, Stöhr, Ferguson.

HYGIENE — Bergey, Harrington.

MEDICAL JURISPRUDENCE — Witthaus and Becker, Draper.

Obstetrics — Williams, Hirst, Webster, Edgar.

Otolaryngology — Kyle, Diseases of Nose and Throat; Williams, Diseases of Upper Respiratory Tract; Hovell, Diseases of Ear; Lake, Diseases of Ear; Richards, Nose and Throat; Saunders, Medical Hand Atlases: Gründewald, Diseases of the Larynx; Brühl and Politzer, Diseases of Ear.

OPHTHALMOLOGY - May, Haab, Fuchs, De Schweinitz.

ORTHOPEDIC SURGERY — Bradford and Lovett, Rotch.

Pathology — Delafield and Prudden, Zeigler.

Physical Diagnosis — Cabot, Anders, Butler's Diagnostics.

РнуsіоLogy — Brubaker, Howell, Landois, Schäfer.

Practice of Medicine — Osler, Anders, Tyson.

Surgery — de Nancrède, Da Costa, Park, Warren.

THERAPEUTICS — Wood, Hare, Cushing and Wilcox on Materia Medica and Pharmacy, Cushny.

PSYCHIATRY — Kraepelin, Clinical Psychiatry, White, Outlines of Psychiatry, De Fursac, Manuel of Psychiatry, Sherrington, Integrative Action of the Nervous System.

EXAMINATIONS AND GRADUATION

During the first year of the study of medicine in this school, examinations will be required in Embryology, Anatomy and Physiology of the Nervous System, Physiology, Histology (including a practical examination in the laboratory); Organic Chemistry, and Anatomy (Osteology and Arthrology). In the second year examinations will be required in Physiological Chemistry, Pathology (including a practical slide examination). Physiology, Hæmatology, Urinalysis, Bacteriology, Anatomy, and Materia Medica. In the third year examinations will be required in Regional Anatomy and in the Anatomy of the Central Nervous System, Physical Diagnosis, Therapeutics, Minor Surgery, Laryngology, (or Otology), Obstetrics, Medicine, Medical Jurisprudence, Dermatology, and a practical examination in Anatomy involving actual dissection of the cadaver. In the fourth year final examinations will be held in Therapeutics, Surgery, Medicine, Obstetrics, Gynecology, Medical Jurisprudence, Psychiatry, Dermatology, Hygiene, Otology (or Laryngology), Pediatrics, Ophthalmology, and Orthopedics.

Every candidate for the degree of Doctor of Medicine must

- 1. Be more than twenty-one years of age;
- 2. Be of good moral character;
- 3. Have studied medicine not less than four years of thirty-six weeks each in four different calendar years, of which the last year must have been taken at this school;
- 4. Have dissected all parts of the cadaver;
- 5. Present evidence of attendance upon eight cases of confinement. No candidate shall receive his diploma nor be accredited with the degree until he has passed all courses in which he is subject to examination.

EXPENSES

Tuition is to be paid in two equal installments on October first and March first. Laboratory fees must be paid to the Treasurer at the beginning of each Semester. Tuition — For each of the four courses \$125.00 Chemicals and ordinary breakage, First year 8.00 Second year 5.00 Histology. Material, First year 6.00 Biology and Embryology. Material, First year 6.00 Bacteriology. Material, Second year 3.00 5.00 Physiology. Material, Second year, First semester 5.00

Those desiring further information may address George S. Graham, M. D., secretary, Hanover, N. H.

Second year, Second semester. . . .

4.00

at cost

30.00 to 100.00

10.00 to 20.00

10.00 to 30.00

3.00 to 5.00

STUDENTS

GRADUATES OF 1910—HOSPITAL APPOINTMENTS

Black, Dennis Leo, B.S., Massachusetts State Hospital, Tewksbury.
Felt, Paul Revere, A.B., Gardner State Colony, Gardner, Mass.
Field, Thomas Sullivan, A.B., Williamsburgh Hospital, Brooklyn, N.Y.
Haley, Paul, Carney Hospital, Boston.

Langill, Morton Howard, B.S., Mary Hitchcock Hospital.

McKendree, Charles Alphonso, Assistant Physician, Cromwell Health School, Conn.

Matthews, Frank Harrison, Rhode Island General Hospilal, Providence. Reilly, Thomas Edward, B.S., Worcester City Hospital, Mass.

Storrs, Harry Carl, B.S., Mary Hitchcock Hospital.

Trickey, Charles Lemuel, Massachusetts State Hospital, Tewksbury.

FOURTH YEAR. CLASS OF 1911.

| Name | Residence | Room | | |
|--|----------------------|-----------------|--|--|
| Abbott, Charles Roger | Sanbornton, N. H. | 41 So. Main St. | | |
| Bartlett, Walter Alonso | Manchester, N. H. | 8 Lebanon St. | | |
| Bostick, Warren John | Thompsonville, Conn. | 3 Lebanon St. | | |
| Davis, Stillman George | Nashua, N. H. | 41 So. Main St. | | |
| Fiske, Eben Winslow, A.B. | Waltham, Mass. | 4 School St. | | |
| Grau, LeRoy Charles | North Adams, Mass. | 23 No. Main St. | | |
| Sanborn, Benjamin Eugene, Jr. A.B. Leavitt's Hill, N.H. 9 W. South St. | | | | |
| Shaw, Arthur Briggs, B.S. | Terry, Mont. | 9 W. South St. | | |
| Smith, Morris Kellogg, A.B. | Hanover, N. H. 13 | W.Wheelock St. | | |
| Worthen, Thacher Washburn, | A.B. Hanover, N. H. | 11 Webster Ave. | | |

THIRD YEAR. CLASS OF 1912

| Name | Residence | Room |
|-----------------------------|----------------------|-----------------|
| Clarke, George Joshua | Jamaica, Vt. | 3 Pleasant St. |
| Daly, Edmund Joseph | Bayonne, N. J. | 41 So. Main St. |
| Dunbar, Clarence Eugene, A. | B. Manchester, N. H. | 41 So. Main St. |
| Lewis, Frank Edward, A.B. | Auburndale, Mass. | 9 W. South St. |
| Vivian, William James | New Britain, Conn. | 5 College St. |
| Wesley, John Willare | St. Johnsbury, Vt. | 2 Wentworth St. |
| Woodman, Arthur Beattie | Bath, N. H. | 23 No. Main St. |

SECOND YEAR. CLASS OF 1913

| Allen, George Edgar, A.B. | Bradford, Mass. | 2 Elm St. |
|------------------------------|--------------------------|-----------------|
| Barker, James Creighton, Jr. | New Milford, Conn. | 9 W. South St. |
| Blood, Robert Oscar | White River Junction, Vt | . 9 College St. |
| Cleasby, Howard Wilfred | Littleton, N. H. | Bridgman Block |
| Emery, William Edward | Surry, Me. | 23 N. Main St. |
| Ferenczi, Louis John | Bayonne, N. J. | 23 —. Main St. |
| Hunt, Wesley Marshall, B.S. | Hanover, N. H. | 13 E.Wheelock |
| Leete, Edward Don | Concord, N. H. | 5 College St. |
| Norris, J. Sherman | Rochester, N .H. | 9 W. South St. |
| Robbins, Edmund Henry | Manchester, N. H. | 8 Lebanon St. |
| Stokes, Leroy Tyler | Rochester, N. H. | 23 No. Main St. |

FIRST YEAR. CLASS OF 1914

| Name | Residence | Room |
|----------------------------|---------------------|----------------|
| Burnham, Arthur Washington | Norwich, Vt. | Norwich, Vt. |
| Card, John Henry | Portland, Me. | 13 Richardson. |
| Carroll, William Edward | Passaic, N. J. | Bridgman Block |
| Clute, Howard Merrill | Florence, Mass. | 23 No. Main St |
| Doyle, Joseph Donald | Brockton, Mass. | 14 Wheeler St. |
| Freund, Harold Herman | New York City | 32 Mass. |
| Ganley, Arthur Joseph | Methuen, Mass. | Ford Block. |
| Gaylord, James Frederick | South Hadley, Mass. | 26 Richardson. |
| Holland, Arthur Gregory | Manchester, N. H. | 44 College St. |
| Montgomery, James Blaine | North Lebanon, Me. | 17 New Hamp. |
| Morrill, Allan Donald | Chicago, Ill. | 53 Fayer. |
| Norris, Rolf Clarke | Methuen, Mass. | 18 Crosby. |
| Sargent, Arthur Forrest | Pittsfield, N. H. | 8 Thornton. |
| Wheatley, Frank Edward | No. Abington, Mass. | 16 New Hamp. |

ALUMNI ASSOCIATION FOUNDED IN 1886.

President, WILLIAM A. MEGRATH, M.D., '86.

Secretary, HOWARD N. KINGSFORD, M.D., '98, Hanover, N. H.

Annual reunion at Concord, N. H., at the time of the meeting of the New Hampshire Medical Society in the latter part of May.





